

**Richard O. Cunningham
202.429.6434**

**PUBLIC VERSION
Confidential Business Information
Deleted from single brackets [] at
Page 4 and Indexed at Exhibit 1**

November 12, 2001

Via Electronic Delivery to FR0001@USTR.gov

Gloria Blue
Executive Secretary
TPSC, Office of the U.S. Trade Representative
600 17th Street, N.W.
Washington, DC 20508

Re: Steel 201, Request To Exclude Products From Section 203 Import Relief –
Textured Rolled Carbon (TRC) Steel

Dear Ms. Blue:

This exclusion request is filed on behalf of our client AvestaPolarit Oy and its subsidiaries and affiliates, which include domestic and foreign producers, importers and purchasers of finished and semifinished stainless steel products and carbon cold-rolled steel (collectively, "AvestaPolarit"). This exclusion request is timely filed pursuant to the instructions in the Office of the United States Trade Representative's notice, 66 Fed. Reg. 54,321 (October 26, 2001).

In accordance with 19 C.F.R. § 2003.6, we request confidential treatment for certain factual information deleted or indexed in this public version of our brief as marked in single brackets. This information, contained at page 4 and Exhibit 1, consists of data regarding AvestaPolarit's shipment quantities and values of U.S. imports of TRC, the disclosure of which would cause substantial harm to the competitive position of the company. This information has been deleted from this public version at page 4 and indexed in Exhibit 1 in this submission. This information is being submitted to the International Trade Commission pursuant to the Administrative Protective Order ("APO") in its Steel 201 investigation.

BEFORE THE
UNITED STATES TRADE REPRESENTATIVE

Pursuant to 66 Fed.Reg. 54,321 (October 26, 2001)

EXCLUSION REQUEST ON BEHALF OF AVESTAPOLARIT
TEXTURED ROLLED CARBON STEEL

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November 12, 2001

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REQUEST TO EXCLUDE PRODUCTS FROM SECTION 203 IMPORT RELIEF – TEXTURED ROLLED CARBON STEEL (TRC)

Pursuant to the Notice published in the Federal Register on October 26, 2001, 66 Fed. Reg. 54,321, AvestaPolarit Oy and its subsidiaries and affiliates (collectively “AvestaPolarit”), which include domestic and foreign producers, importers and purchasers of carbon and stainless steel products, request that the following product be excluded from any increased duty, tariff-rate quota, or quantitative restriction that the President may impose under Section 203 (a) of the Trade Act. The product for which AvestaPolarit requests exclusion is textured rolled carbon (“TRC”) steel, classified as a carbon and alloy steel flat product.

I. EXECUTIVE SUMMARY

Any remedy recommended for carbon steel flat products should exclude imports of TRC steel. TRC steel is manufactured using specialized processes that provide the product with unique physical properties that are unlike other cold rolled carbon steel products. This product is necessary for the production of seat belt retractor springs that meet the specific technical regulations of the U.S. Department of Transportation’s National Highway Traffic Safety Administration. AvestaPolarit is aware of no U.S. producer of TRC steel that meets the federal requirements on producers of seat belt retractor assemblies. AvestaPolarit produces TRC steel at its Precision Strip facility in the United Kingdom¹ for sale and shipment to Kern-Liebers USA Inc. (“Kern-Liebers”) in the U.S.²

¹ See the quantities and value reported in AvestaPolarit’s Exclusion Request Data Sheet attached at Exhibit 1. The import quantity and value data represents only AvestaPolarit’s shipments to the U.S. and no shipments by any other producer, as AvestaPolarit is unaware of the import volumes for shipments of TRC from other sources to the U.S. The estimated quantity
(Continued ...)

II. INFORMATION REQUESTED BY THE USTR

Below is the information requested by USTR in support of this exclusion request.

A. The designation of the product under a recognized standard or certification (e.g., ASTM, DIN), or the commercial name for the product and the HTS number under which the product enters the United States.

The commercial name is textured rolled carbon steel. TRC imported into the U.S. is classified under the following HTSUS subheadings:³

- 7211.23.3000 and .4500 - Flat-rolled products of iron or nonalloy steel, of a width of less than 600 mm, not clad, plated or coated: Not further worked than cold-rolled (cold-reduced): Containing by weight less than 0.25 percent of carbon: Of a width less than 300 mm: Of a thickness not exceeding 1.25 mm.
- 7211.29.2090 - Flat-rolled products of iron or nonalloy steel, of a width of less than 600 mm, not clad, plated or coated: Not further worked than cold-rolled (cold-reduced): Other than containing by weight less than 0.25 percent of carbon: Of a width less than 300 mm: Of a thickness exceeding 0.25 mm: Not of a width less than 51 mm, in coils.
- 7211.29.4500 - Flat-rolled products of iron or nonalloy steel, of a width of less than 600 mm, not clad, plated or coated: Not further worked than cold-rolled (cold-reduced): Other than containing by weight less than 0.25 percent of carbon: Not of a width less than 300 mm.

of U.S. producers' U.S. commercial shipments is estimated at zero because AvestaPolarit is aware of no U.S. producers that produce or ship any commercial quantities of TRC steel that meets U.S. Department of Transportation regulatory standards.

² Since 2000, Kern-Liebers is the only customer of AvestaPolarit's TRC steel, and prior to 2000 was AvestaPolarit's primary customer.

³ See page from Harmonized Tariff Schedule of the United States. Attached as Exhibit 2.

B. A description of the product based on physical characteristics (e.g., chemical composition, metallurgical properties, dimensions, surface quality) so as to distinguish the product from products for which exclusion is not sought.

TRC steel is a carbon steel flat product included in this investigation among cold rolled sheet and strip other than GOES. Texture within this context does not refer to the surface topography, but to a crystallographic texture. TRC is manufactured using a combination of a patenting heat treatment and a large cold rolling reduction using a 20-roll senzimer type rolling mill, resulting in the majority of the 111 crystal planes of the lattice lying in the direction of rolling. This texture enhances the resistance to fracture, giving a high fatigue strength. TRC steel is significantly stronger than other cold-rolled steel – it has a tensile strength of approximately 2,600 N/mm² compared to standard cold-rolled steel which is reported to have a tensile strength of only 600 N/mm². The optimum properties are only realized by close control of the steel's composition, its internal cleanliness, the heat treatment, the cold rolling and the surface quality. TRC steel has a carbon content of 0.65 to 0.95 percent, a width of less than 200 mm.

TRC steel is subject to a process known as patenting, a process to which other types of cold-rolled steel are not subjected and which significantly alters the material properties of TRC steel, modifying its microstructure and increasing its tensile strength. The patenting process requires specialized equipment, namely a patenting processing furnace, a piece of equipment not used in the production of other cold-rolled steel products. Moreover, TRC steel is rolled on a 20 roll senzimer type rolling mill, in order to give TRC steel its high tensile strength of up to 2,600 N/mm², which is over 400 percent higher than other types of cold rolled steel not subject to the patenting process. Thus, the equipment used to manufacture TRC steel is significantly different from other equipment used in the cold-rolled process.

C. The basis for requesting an exclusion.

TRC steel requires unique equipment and expertise for it to be manufactured. Although producers in several countries have attempted commercial manufacturing of TRC steel for U.S. seat belt retractors, AvestaPolarit understands that only one other producer in Germany is able to meet the high technical requirements of U.S. customers for compliance with U.S. motor vehicle safety standards.

TRC steel represents an extremely small share of U.S. consumption of other carbon flat rolled products. As reported by AvestaPolarit in the attached exclusion request data sheet,⁴ annual shipments of TRC steel during the period of review have ranged from slightly more than [] short tons in 1997 to slightly more than [] short tons in 2000. The ITC Staff Report calculates total U.S. consumption of cold-rolled sheet and strip other than GOES at approximately 40 million short tons per year.⁵ Clearly the volume of TRC steel is a de minimis fraction of total U.S. consumption of this general product category.

TRC steel is necessary for the construction of seat belt retractor mechanisms that comply with the mandatory technical performance specifications of U.S. highway safety regulations. As set forth more fully in Part III, these specifications are a necessary and important part of U.S. highway safety programs. Because AvestaPolarit is aware of no U.S. production of TRC steel that complies with these federal regulations, the President should exclude TRC steel from any trade restrictions on other carbon flat rolled products.

⁴ Attached at Exhibit 1.

⁵ ITC public staff report at FLAT-C-5.

It would be a simple matter for the U.S. Customs Service (“Customs”) to administer an exclusion for TRC steel from any remedy imposed on the broader category of carbon flat products. As shown below, NHTSA Safety Standard 209 is highly technical and specific. Accordingly, importers would simply file a statement, along with the package of documents presented at entry, certifying that the imported steel has the physical properties necessary to be used in the manufacture of a seat belt retractor mechanism in compliance with the requirements of NHTSA Safety Standard 209. Customs regularly accepts the certification of importers as to the physical characteristics of the imported merchandise⁶ and enforces accuracy and compliance through the potential liability for penalties, ranging in amount up to the value of the merchandise.⁷ Accordingly, it would be a simple matter for Customs to collect a certification from the importer that the imported steel meets a highly specific standard.

D. The names and locations of any producers, in the United States and foreign countries, of the product.

AvestaPolarit is aware of no current or recent U.S. producer of TRC. Although there may be several U.S. producers of carbon steel flat products, AvestaPolarit is aware of no U.S. producers that manufacture TRC that will allow seatbelt retractor springs to be produced to meet the specifications of the Department of Transportation’s regulations governing seat belt retractor assemblies. AvestaPolarit is aware of no producer in the current Steel 201 investigation that has

⁶ See, e.g., 19 C.F.R. § 10.1 (certification that imported goods comprise American-origin merchandise returned to the U.S.); 19 C.F.R. § 181.11 (NAFTA certificate of origin); 19 C.F.R. § 351.402 (certificate of non-reimbursement of antidumping or countervailing duties).

⁷ 19 U.S.C. § 1592.

alleged that it produces TRC steel, or that has opposed the several requests to exclude this product. Apparently, U.S. companies have decided that the specialized equipment and production processes necessary for the production of TRC steel results in an insufficient return on investment. AvestaPolarit is aware of only one foreign producer, Kaltwalzwerk Brockhaus GmbH in Germany, that also produces TRC.

E. Total U.S. consumption of the product, if any, by quantity and value for each year from 1996 to 2000, and projected annual consumption for each year from 2001 to 2005, with an explanation of the basis for the projection.

AvestaPolarit does not have information available to it to determine total U.S. consumption and projected annual consumption of TRC. AvestaPolarit's shipments by quantity and value to the United States are outlined at Exhibit 1. AvestaPolarit anticipates shipping comparable amounts to its current customer in future years.

F. Total U.S. production of the product for each year from 1996 to 2000, if any.

AvestaPolarit is aware of no U.S. producers that manufacture TRC.

G. The identity of any U.S.-produced substitute for the product, total U.S. production of the substitute for each year from 1996 to 2000, and the names of any U.S. producers of the substitute.

TRC steel has a highly specialized end use, as part of automobile seat belt retractor assemblies. While it is possible to use TRC steel in other motor springs, only a small fraction of AvestaPolarit's TRC steel is used for applications other than seat-belt retractor springs. The ITC

Commission's staff has acknowledged that "[s]eat belt retractor steel, because of its cost, is not commercially interchangeable with other cold-rolled steel products."⁸

III. DEPARTMENT OF TRANSPORTATION REGULATIONS

Pursuant to the National Traffic and Motor Vehicle Safety Act of 1966, the Secretary of Transportation is authorized to issue motor vehicle safety standards to "meet the need for motor vehicle safety."⁹ The Secretary delegates this authority to the director¹⁰ of the National Highway Traffic Highway Safety Administration ("NHTSA"), the federal agency charged with maintaining the safety of America's roadways. Accordingly, NHTSA issued Motor Vehicle Safety Standard No. 209 ("NHTSA Safety Standard 209")¹¹ to implement Congress's intent "...to protect the public by providing for the establishment of minimum Federal safety standards for automobile seat belts sold or shipped in interstate commerce."¹²

NHTSA Safety Standard No. 209 regulates seat belts in multiple ways¹³ and the physical properties of TRC steel make compliance with these regulations possible. TRC steel is produced to the high performance specification required by seat belt retractor spring manufacturers in order to meet the stringent NHTSA standards. For example, the NHTSA has provided specific

⁸ Certain Carbon Steel Products sunset review, Prehearing Report to the Commission (August 16, 2000) (public version), at COLD-I-16. Attached at Exhibit 3.

⁹ 49 U.S.C. § 30111. Attached at Exhibit 4.

¹⁰ 49 C.F.R. § 1.50. Attached at Exhibit 5.

¹¹ 49 C.F.R. § 571.209. Attached at Exhibit 6.

¹² S. Rep. No. 88-665, at 1136 (1963) (Senate Report accompanying Pub. L. No. 88-201 which authorized the predecessor to Safety Standard No. 209).

¹³ 49 C.F.R. § 571.209.

corrosion resistance requirements.¹⁴ Retractors, after being tested “in accordance with American Society for Testing and Materials B11773, ‘Standard Method of Salt Spray (Fog) Testing’” must “...be free of ferrous or nonferrous corrosion which may be transferred, either directly or by means of the webbing, to the occupant or his clothing when the assembly is worn.”¹⁵

In addition, seat belt retractors must also meet stringent performance specifications. For example, in the case of nonlocking retractors, under certain circumstances, “the maximum retraction force shall not exceed 5N in any strap or webbing that contacts the shoulder...”¹⁶ Automatic locking retractors attached to upper torso restraints must be designed in a manner so as to “not increase the restraint on the occupant of the seat belt assembly during use in a vehicle traveling over rough roads” in a prescribed test.¹⁷ Moreover, emergency-locking retractors, on either lap belts or lap belt/shoulder harness combinations, “Shall lock before the webbing extends 25 mm when the retractor is subjected to an acceleration of 7 m/s^2 (0.7 g)” when tested in accordance with mandated procedures.¹⁸

Due to the critical public safety implications of NHTSA Safety Standard No. 209, any violation of these requirements risks the imposition of stringent civil penalties.¹⁹ In general, persons who violate the regulation are liable to the United States Government for up to \$5000

¹⁴ Id.

¹⁵ Id.

¹⁶ Id.

¹⁷ Id.

¹⁸ Id.

¹⁹ 49 C.F.R. § 578.6(a)(1). Attached at Exhibit 7.

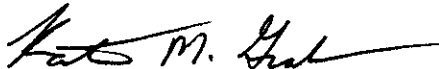
per violation.²⁰ Each defective piece of equipment constitutes a separate violation.²¹ The maximum civil penalties for a related series of violations is \$15,000,000.²²

The Department of Transportation has mandated that all seat belts sold in the United States must conform to these regulations. TRC steel is one of the critical components in manufacturing the required spring retraction mechanism. Accordingly, the President should not place any trade restrictions on imports of steel that are made in order to comply with these regulations, especially where there is no comparable U.S. production.

IV. CONCLUSION

In light of all the above, AvestaPolarit requests that the USTR exclude TRC steel from any remedy recommended to the President for carbon and alloy steel flat products. TRC steel is not produced in the United States and its availability is critical to U.S. driving safety standards.

Respectfully submitted,



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²⁰ Id.

²¹ See id.

²² See id.

LIST OF EXHIBITS

PUBLIC VERSION

C	Exhibit 1	Exclusion Request Data Sheet
	Exhibit 2	Harmonized Tariff Schedule of the United States
	Exhibit 3	Certain Carbon Steel Products sunset review, Prehearing Report to the Commission (August 16, 2000) (public version)
	Exhibit 4	49 U.S.C. § 30111
	Exhibit 5	49 C.F.R. § 1.50
	Exhibit 6	49 C.F.R. § 571.209
	Exhibit 7	49 C.F.R. § 578.6(a)(1)

C: Confidential Material Enclosed

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EXHIBIT 1

PUBLIC VERSION



UNITED STATES INTERNATIONAL TRADE COMMISSION
Washington, DC



STEEL, Inv. No. TA-201-73

PUBLIC VERSION

EXCLUSION REQUEST DATA SHEET

If you are interested in requesting that specific products be excluded from this investigation, please supply the following information to the Commission by no later than Wednesday, October 17, 2001. Complete a separate exclusion request form for every product you are requesting an exclusion for. You may fax the completed form to the attention of D.J. Na at 202-205-3205.

Firm: AvestaPolarit Precision Strip	Fax #: 011-44-1142-43-1277						
Contact person: Adriana Plug	Email address: Adriana.Plug@avestapolarit.com						
Have you submitted an exclusion request in a previous letter? No.							
HTS number(s) covering the product requested for exclusion: 7211.23.3000 and .4500, or 7211.29.2090 and .4500							
Detailed description of product requested for exclusion (please do not only refer to the model number): Texture Rolled ("TRC") steel, suitable for use in the manufacture of seat belt retractor spring mechanisms in compliance with U.S. National Highway Traffic Safety Administration regulation 49 C.F.R. 571.209. Texture within this context does not refer to the surface topography, but to a crystallographic texture. TRC is manufactured using a combination of a patenting heat treatment and a large cold rolling reduction using a 20 roll senzimer type rolling mill, resulting in the majority of the 111 crystal planes of the lattice lying in the direction of rolling. This texture enhances the resistance to fracture, giving a high fatigue strength for example. The optimum properties are only realized by close control of:- the steel's composition, its internal cleanliness, the heat treatment, the cold rolling and the surface quality. It has a carbon content of 0.65 to 0.95%, has a width of less than 200mm and has a tensile strength of approximately 2600N/mm.							
(quantities and values below are AvestaPolarit shipments only)* (*Quantities and values have been indexed)							
Quantity (in short tons) of U.S. imports of product requested for exclusion:							
Source	1996	1997	1998	1999	2000	Jan.-June 2000	Jan.-June 2001
Canada	-	-	-	-	-	-	-
Mexico	-	-	-	-	-	-	-
All others	100	87.8	96.3	114.5	129.8	67.5	64.3
Total	100	87.8	96.3	114.5	129.8	67.5	64.3
Value (landed, duty-paid in U.S. dollars) of U.S. imports of product requested for exclusion:							
Source	1996	1997	1998	1999	2000	Jan.-June 2000	Jan.-June 2001
Canada	-	-	-	-	-	-	-
Mexico	-	-	-	-	-	-	-
All others	100	88.2	95.7	107.6	121.2	62.9	60.0
Total	100	88.2	95.7	107.6	121.2	62.9	60.0
Estimated quantity (in short tons) of U.S. producers' U.S. commercial shipments (not including internal consumption or exports) of product requested for exclusion (please indicate basis for estimates):							
Source	1996	1997	1998	1999	2000	Jan.-June 2000	Jan.-June 2001
Total	0	0	0	0	0	0	0

PUBLIC VERSION

PUBLIC VERSION

EXHIBIT 2

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Harmonized Tariff Schedule of the United States (2001) – Supplement 1 (Rev. 1)

Annotated for Statistical Reporting Purposes

xv
72-17

Heading/ Subheading	Stat. Suf- fix	Article Description	Unit of Quantity	Rates of Duty		
				1		2
				General	Special	
7211 (con.)		Flat-rolled products of iron or nonalloy steel, of a width of less than 600 mm, not clad, plated or coated (con.):				
7211.23		Not further worked than cold-rolled (cold-reduced):				
		Containing by weight less than 0.25 percent of carbon:				
		Of a width of less than 300 mm:				
		Of a thickness exceeding 1.25 mm:				
7211.23.15	00	Of high-strength steel	kg	1%	Free (A+,CA,D,E, IL,J) 0.6% (MX)	25%
7211.23.20	00	Other	kg	1.7%	Free (A+,CA,D,E, IL,J) 1.1% (MX)	25%
7211.23.30	00	Of a thickness exceeding 0.25 mm but not exceeding 1.25 mm	kg	1%	Free (A+,CA,D,E, IL,J) 0.6% (MX)	25%
7211.23.45	00	Of a thickness not exceeding 0.25 mm	kg	0.7%	Free (A+,CA,D,E, IL,J) 0.4% (MX)	25%
7211.23.60		Other		1.5%	Free (A+,CA,D,E, IL,J) 1% (MX)	0.4¢/kg + 20%
	30	Of a thickness exceeding 1.25 mm	kg			
	60	Of a thickness exceeding 0.25 mm but not exceeding 1.25 mm	kg			
	75	Of a thickness not exceeding 0.25 mm: Of a kind for use in making aperture masks for cathode-ray tube video displays	kg			
	85	Other	kg			
7211.29		Other:				
		Of a width of less than 300 mm:				
7211.29.20		Of a thickness exceeding 0.25 mm		1%	Free (A+,CA,D,E, IL,J) 0.6% (MX)	25%
	30	Of a width less than 51 mm, in coils	kg			
	90	Other	kg			
7211.29.45	00	Other	kg	0.7%	Free (A+,CA,D,E, IL,J) 0.4% (MX)	25%
7211.29.60		Other		1.5%	Free (A+,CA,D,E, IL,J) 1% (MX)	0.4¢/kg + 20%
	30	Of a thickness exceeding 1.25 mm	kg			
	80	Other	kg			
7211.90.00	00	Other	kg	1.5%	Free (A+,CA,E,IL, J) 1% (MX)	20%

PUBLIC VERSION

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EXHIBIT 3

PUBLIC VERSION

PUBLIC VERSION



UNITED STATES INTERNATIONAL TRADE COMMISSION
Washington, DC



**CERTAIN CARBON STEEL PRODUCTS FROM
AUSTRALIA, BELGIUM, BRAZIL, CANADA, FINLAND, FRANCE,
GERMANY, JAPAN, KOREA, MEXICO, THE NETHERLANDS,
POLAND, ROMANIA, SPAIN, SWEDEN, TAIWAN, AND
THE UNITED KINGDOM**

Staff Report to the Commission on
Investigations Nos. AA1921-197 (Review),
701-TA-231, 319-320, 322, 325-328, 340, 342, and 348-350 (Review),
731-TA-573-576, 578, 582-587, 604, 607-608, 612, and 614-618 (Review)

Staff assigned:

Elizabeth Haines, *Investigator* (205-3200)
Dennis Fravel, *Industry Analyst* (205-3404)
Craig Thomsen, *Economist* (205-3226)
Justin Jee, *Accountant* (205-3186)
Rhonda Hughes, *Attorney* (205-3083)
Mary Beth Jones, *Attorney* (205-3106)
Gracemary Rizzo, *Attorney* (205-3117)
Vera Libeau, *Supervisory Investigator* (205-3176)

August 16, 2000

PUBLIC VERSION

There are two basic annealing processes: batch and continuous. In a batch annealing process, coils of cold-rolled sheets are stacked on a base. Covers are placed over the stacks to contain the annealing atmosphere, usually hydrogen, which is needed to prevent oxidation of the steel. The annealing furnace is then lowered over the covered stacks. Heating and re-cooling of the sheet may take five or six days. Continuous annealing involves uncoiling the steel and processing it through an annealing furnace continuously, thereby reducing the annealing time to a matter of minutes and achieving greater uniformity of results.

After the steel has been annealed, it is rolled on a temper mill to produce the desired hardness, flatness, and surface quality. Temper rolling of annealed product is required to reduce the tendency of the steel to develop surface distortions during fabrication. Temper rolling involves very light reduction in thickness and should not be confused with cold-rolling.

Cold-rolled that is used as a substrate for hot-dipped galvanized steel is usually not annealed or temper rolled because those operations are done on the continuous galvanizing lines. Product that is used as a substrate for electrolytically galvanized steel or for tin plate is usually annealed and temper rolled.

Like Product Issues

In response to a question soliciting comments regarding the appropriate domestic like product in the Commission's notice of institution of these reviews, all parties except Kern-Liebers either agreed with or did not contest the Commission's definition of like product.¹³ In their prehearing and posthearing briefs, domestic parties argued that the Commission's definition of the domestic like product should be expanded to include microalloyed product considered by the industry to be included in carbon steel.^{14 15}

¹³ Response to notice of institution, Korean respondents, October 21, 1999, p. 10; Hoogovens, October 21, 1999, p. 11; and prehearing brief of the German respondents, August 28, pp. 5-6.

¹⁴ Petitioners' prehearing brief, August 28, 2000, vol. I, pp. 7-17, and vol. III, pp. 7-8; petitioners' posthearing brief, vol. I, p. 11, and vol. II., pp. 19-22.

¹⁵ Data provided by domestic producers for cold-rolled include microalloy products. Because microalloy is not included the scope of the reviews, import data presented in this report do not include microalloy products.

Kern-Liebers argues the product it imports, steel for seat belt retractor springs, should be a separate like product.¹⁶ The company argues that a comparable steel is only produced by one U.S. company, an affiliate of a German company that is not a party to the reviews, and therefore the U.S. company should be excluded from consideration as part of the U.S. domestic industry.¹⁷ However, Kern-Liebers' comments were primarily based on its knowledge of subject imported seat belt retractor springs, rather than on domestically produced seat belt retractor springs.

Physical Characteristics and Uses¹⁸

The cold-rolled steel in question is a texture rolled carbon steel that is made into springs for seat belt retractors. Seat belt retractor springs must conform to the performance criteria of the Federal Motor Vehicle Safety Standard No. 209, Seat Belt Assemblies.¹⁹ Kern-Liebers argues that seat belt retractor steel differs from other cold-rolled steel products in chemical composition, cleanliness and inclusion levels, microstructure, and tensile strength;²⁰ the domestic producer argues that it is one of many steel products in a continuum.²¹ Seat belt retractor steel is "simply one of several end use applications for texture-rolled steel, which is a type of cold-rolled steel."²²

Interchangeability

Kern-Liebers argues that seat belt retractor steel, because of its cost due to its being hardened and tempered, is not commercially interchangeable with other cold-rolled steel products.²³ The domestic

¹⁶ Kern-Liebers, response to notice of institution, October 21, 1999, pp. 6-14; comments concerning adequacy, November 12, 1999; and comments on proposed questionnaires, April 20, 2000.

¹⁷ Kern-Liebers, comments on proposed questionnaires, April 20, 2000, p. 2.

¹⁸ ***

¹⁹ 49 CFR 571.209.

²⁰ Kern-Liebers, response to notice of institution, October 21, 1999, p. 7. For detailed produce specifications of Kern Liebers' imported seat belt retractor steel, see Kern-Liebers, comments on proposed questionnaires, April 20, 2000.

²¹ Theis, prehearing brief, August 28, 2000, p. 9.

²² Statement of Richmond W. Glover, President, Theis, cold-rolled TR, p. 91. See also Theis, prehearing brief, August 28, 2000, p. 12.

²³ Kern-Liebers, response to notice of institution, October 21, 1999, pp. 8-9.

producer argues that texture rolled steel used in seat belt retractor springs is used in other applications, and the limited interchangeability of texture rolled steel is "consistent with other instances of limited interchangeability common across the spectrum of cold rolled products."²⁴

Manufacturing Process and Facilities

Kerns-Liebers contends that the facilities used to manufacture subject imported seat belt retractor steel, as well as the process, are different from those used to produce other cold-rolled steel products.²⁵ Subject imported seat belt retractor steel is subject to a "patenting" process to obtain a sorbitic microstructure and a tensile strength of approximately 1,250 N/mm² (181.3 kpsi).²⁶ The patenting process requires a patenting processing furnace as a continuous patenting system. After the patenting process, imported seat belt retractor steel is subjected to an 80 percent roll reduction, creating a tensile strength of up to 2,600 N/mm² (377 kpsi). Seat belt retractor steel is rolled on a 20-roll Senzimir-type rolling mill to produce the tensile strength.

In contrast, Kern-Liebers notes, other cold-rolled steel reportedly is not subjected to a "patenting" process and from the annealed state is subjected to a roll reduction of only 50 to 60 percent, resulting in a tensile strength of only 600 N/mm² (87 kpsi). Other cold-rolled steel generally also requires annealing and temper rolling. Further, other cold-rolled steel does not use a patenting processing furnace, and is typically rolled in a mill with only 4 rolls, which reportedly does not produce a tensile strength as high as may be required of seat belt retractor steel.

The domestic producer states that it uses the same manufacturing equipment, including 20-roll mills, to produce both seat belt retractor steel as well as other types of cold-rolled steel.²⁷ Further, the same production workers are used to produce texture-rolled steel and other cold-rolled steel.²⁸ Indeed, the company argues that texture-rolled steel "undergoes many of the same manufacturing steps used to

²⁴ Theis, prehearing brief, August 28, 2000, p. 13.

²⁵ Kern-Liebers, response to notice of institution, October 21, 1999, pp. 8-9.

²⁶ N/mm² is newtons (a metric measure of force) per millimeter squared.

²⁷ Theis, prehearing brief, August 28, 2000, p. 14.

²⁸ Ibid.

produce other cold-rolled steels, including rolling, annealing, rerolling, slitting, edging and/or deburring."²⁹

Channels of Distribution

Kerns-Liebers argues that seat belt retractor steel, whether imported or produced domestically, is sold by the steel manufacturer directly to the spring manufacturer. In contrast, other cold-rolled steel may be consumed by the cold-rolled producer itself to produce corrosion-resistant steel or sold on the open market or through steel service centers. The domestic producer argues that other texture-rolled steel for measuring tape steel, spring mechanisms, and band saw products are also sold directly to end users, as are other types of cold-rolled.³⁰

Customer and Producer Perceptions

Kerns-Liebers argues that seat belt retractor steel is produced to the specifications of seat belt retractor spring manufacturers in order to meet the performance requirements established in the Federal Motor Vehicle Safety Standard No. 209, Seat Belt Assemblies. Further, seat belt retractor steel is more expensive than other cold-rolled steel flat products, is more costly to produce because of more steps in the manufacturing process, and has a limited market in volume and number of seat belt retractor spring manufacturers. The domestic producer argues that within the cold-rolled continuum, there are numerous "scope products that are produced to specifications for particular end uses."³¹

Price

Seat belt retractor steel was reportedly approximately twice as expensive as other cold-rolled steel during the original investigation.³² The difference in price is due to the high strength and durability standards required of seat belt retractor steel that require more complex operations and quality controls.

²⁹ Ibid.

³⁰ Theis, prehearing brief, August 28, 2000, pp. 13-14.

³¹ Theis, prehearing brief, August 28, 2000., p. 15.

³² Kern-Liebers, response to notice of institution, October 21, 1999, p. 9.

The domestic producer argues that it sells steel for power springs and other stamped parts for ***.³³ ***. Theis states that texture-rolled steel for seat belt retractor springs is "on the high end of the pricing spectrum for cold-rolled steel; {and that} the price is comparable to other high carbon steels produced to exacting specifications, including hardened and tempered steel used for power spring and miscellaneous parts."³⁴

U.S. MARKET PARTICIPANTS

U.S. Producers

Nineteen firms reported producing cold-rolled in the United States over the period of these reviews compared to 14 in the first plate investigation and 21 during the second series of investigations. Table COLD-I-3 presents data on cold-rolled producers, their positions on revocation, locations of production facilities, parent firms, and related foreign producers.

U.S. Importers

Thirty-one firms reported imports of cold-rolled during the period of review. Data on U.S. producers' imports of cold-rolled are presented in Part III.

APPARENT U.S. CONSUMPTION AND MARKET SHARES

Table COLD-I-4 presents apparent U.S. consumption for the review period and table COLD-I-5 presents U.S. market shares for the same period.

³³ Theis, prehearing brief, August 28, 2000, p. 15.

³⁴ Statement of Richmond W. Glover, President, Theis, cold-rolled transcript, p. 93.

EXHIBIT 4

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the United States Code. The reference to fiscal year 1992 is omitted as obsolete. House Report No. 103-180.

LIBRARY REFERENCES

American Digest System

Appropriations of federal funds, see United States ¶85.

Encyclopedias

Appropriations of federal funds, see C.J.S. United States § 123.

WESTLAW ELECTRONIC RESEARCH

United States cases: 393k[add key number].

See, also, WESTLAW guide following the Explanation pages of this volume.

SUBCHAPTER II—STANDARDS AND COMPLIANCE

§ 30111. Standards

(a) **General requirements.**—The Secretary of Transportation shall prescribe motor vehicle safety standards. Each standard shall be practicable, meet the need for motor vehicle safety, and be stated in objective terms.

(b) **Considerations and consultation.**—When prescribing a motor vehicle safety standard under this chapter, the Secretary shall—

(1) consider relevant available motor vehicle safety information;

(2) consult with the agency established under the Act of August 20, 1958 (Public Law 85-684, 72 Stat. 635), and other appropriate State or interstate authorities (including legislative committees);

(3) consider whether a proposed standard is reasonable, practicable, and appropriate for the particular type of motor vehicle or motor vehicle equipment for which it is prescribed; and

(4) consider the extent to which the standard will carry out section 30101 of this title.

(c) **Cooperation.**—The Secretary may advise, assist, and cooperate with departments, agencies, and instrumentalities of the United States Government, States, and other public and private agencies in developing motor vehicle safety standards.

(d) **Effective dates of standards.**—The Secretary shall specify the effective date of a motor vehicle safety standard prescribed under this chapter in the order prescribing the standard. A standard may not become effective before the 180th day after the standard is prescribed or later than one year after it is prescribed. However, the Secretary may prescribe a different effective date after finding, for good cause

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shown, that a different effective date is in the public interest in publishing the reasons for the finding.

(e) **5-Year plan for testing standards.**—The Secretary shall establish and periodically review and update on a continuing basis a 5-year plan for testing motor vehicle safety standards prescribed under this chapter that the Secretary considers capable of being tested. In developing the plan and establishing testing priorities, the Secretary shall consider factors the Secretary considers appropriate, consistent with section 30101 of this title and the Secretary's other duties and powers under this chapter. The Secretary may change at any time those priorities to address matters the Secretary considers of greater priority. The initial plan may be the 5-year plan for compliance testing in effect on December 18, 1991.

(Added Pub.L. 103-272, § 1(e), July 5, 1994, 108 Stat. 944.)

HISTORICAL AND STATUTORY NOTES

Revision Notes and Legislative Reports
1994 Acts.

Revised Section	Source (U.S. Code)	Source (Statutes at Large)
30111(a)	15:1392(a), (b), (e) (1st sentence).	Sept. 9, 1966, Pub.L. 89-563, §§ 102(13), 103(a)-(c), (e), (f), 107 (related to standards), 80 Stat. 719, 721.
30111(b)	15:1391(13). 15:1392(f).	
30111(c)	15:1396 (related to standards).	
30111(d)	15:1392(c), (e) (last sentence).	
30111(e)	15:1392(j).	Sept. 9, 1966, Pub.L. 89-563, 80 Stat. 718, § 103(j); added Dec. 18, 1991, Pub.L. 102-240, § 2505, 105 Stat. 2084.

In subsection (a), the words "shall prescribe" are substituted for "shall establish by order" in 15:1392(a) and "may by order" in 15:1392(e)(1st sentence) for consistency. The words "amend or revoke" in 15:1392(e)(1st sentence) and 1397(b)(1)(last sentence) are omitted because they are included in "prescribe". The words "appropriate Federal" in 15:1392(a) and "Federal" in 15:1392(e)(1st sentence) are omitted as surplus. The words "established under this section" are omitted because of the restatement. The text of 15:1392(b) is omitted as surplus because 5.chs. 5, subch. II, and 7 apply unless otherwise stated.

In subsection (b)(1), the words "including the results of research, development, testing and evaluation activities conducted pursuant to this chapter" are omitted as surplus.

In subsection (b)(2), the words "agency established under the Act of August 20, 1958 (Public Law 85-684, 72 Stat. 635)" are substituted for 15:1391(13) and "the Vehicle Equipment Safety Commission" in 15:1392(f) because of the restatement. The citation in parenthesis is included only for information purposes.

In subsection (b)(4), the words "contribute to" are omitted as surplus.

In subsection (c), the words "departments, agencies, and instrumentalities"

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the United States Government, States, and other public and private agencies" are substituted for "other Federal departments and agencies, and State and other interested public and private agencies" for consistency. The words "planning and" are omitted as surplus.

In subsection (d), the words "The Secretary" are added for clarity. The words "effective date" are substituted for "the date ... is to take effect" to eliminate unnecessary words. The words "under this chapter" are added for clarity. The words "However, the Secretary may prescribe a different effective date" are substituted for "unless the Secretary" for

clarity. The word "different" is substituted for "earlier or later" to eliminate unnecessary words.

In subsection (e), the words "duties and powers" are substituted for "responsibilities", and the word "change" is substituted for "adjust", and for clarity and consistency in the revised title. House Report No. 103-180.

References in Text

The Act of August 20, 1958, referred to in subsec. (b)(2), is Pub.L. 85-684, Aug. 20, 1958, 72 Stat. 635, which is set out as a note under former section 313 of Title 23, Highways.

LIBRARY REFERENCES

Administrative Law

National Highway Traffic Safety Administration, see 49 CFR Parts 552, 564, 567, 571, 572, 575, and 586.

American Digest System

Authority and powers of federal officers and exercise thereof, see United States ¶40.

Heads of executive departments, see United States ¶32.

Product safety regulation in general, see Consumer Protection ¶11.

Encyclopedias

Heads of executive departments, see C.J.S. United States § 32.

Power and authority of federal officers, see C.J.S. United States §§ 38 to 40.

Product safety regulation; National Traffic and Motor Vehicle Safety Act, see C.J.S. Credit Reporting Agencies; Consumer Protection § 72.

WESTLAW ELECTRONIC RESEARCH

Consumer protection cases: 92Hk[add key number].

United States cases: 393k[add key number].

See, also, WESTLAW guide following the Explanation pages of this volume.

NOTES OF DECISIONS

Impracticable standards 1

Judicial review 5

Meeting need for motor vehicle safety 2

Objective standards 3

Practicable standards 1

Types of motor vehicles 4

1. Practicable standards

Steering-column standard promulgated by Department of Transportation for trucks under 10,000 pounds was "impracticable" and in excess of Department's authority, at least as applied to final-stage manufacturers of custom-built trucks who could not economically crash test such customized trucks in order to demonstrate compliance with standard;

standard provided final-stage manufacturers with no means of demonstrating compliance and would effectively eliminate manufacture of customized trucks for specialized uses. National Truck Equipment Ass'n v. National Highway Traffic Safety Admin., C.A.6, 1990, 919 F.2d 1148, rehearing denied 928 F.2d 739.

There was adequate basis in rule-making record to support National Highway Traffic Safety Administration's adoption of amended rule governing vehicle identification numbers, and such rule was reasonable and practicable. Vehicle Equipment Safety Commission v. National Highway Traffic Safety Administration, C.A.4, 1979, 611 F.2d 53.

HISTORICAL AND STATUTORY NOTES

Revision Notes and Legislative Reports

1998 Acts. House Conference Report No. 105-550 and Statement by President, see 1998 U.S. Code Cong. and Adm. News, p. 64.

House Conference Report No. 105-599, see 1998 U.S. Code Cong. and Adm. News, p. 297.

Codifications

Section 7104(c) of Pub.L. 105-206, set out in the credit to this section, was added by Pub.L. 105-206, § 9012(a).

Amendments

1998 Amendments. Subsec. (a). Pub.L. 105-178, § 7104(c), as added Pub.L. 105-206, § 9012(a), inserted after "Secretary" the phrase "for the National Highway Traffic Safety Administration".

Effective and Applicability Provisions

1998 Acts. Title IX (sections 9001 to 9016) of Pub.L. 105-206 and the amendments made by such Title shall take effect simultaneously with the enactment of the Transportation Equity Act for the 21st Century, Pub.L. 105-178, which was approved June 9, 1998. For purposes of all Federal laws, the amendments made by such Title IX shall be treated as if included in the Transportation Equity Act for the 21st Century (Pub.L. 105-178) at the time of the enactment of such Act (June 9, 1998), and the provisions of, and the amendments made by, such Act (Pub.L. 105-178), as in effect prior to July 22, 1998, that are amended by Title IX of Pub.L. 105-206 shall be treated as not being enacted, see section 9016 of Pub.L. 105-206, set out as a note under section 101 of Title 23.

LIBRARY REFERENCES

American Digest System

United States ◊85.

Encyclopedias

C.J.S. United States § 123.

WESTLAW ELECTRONIC RESEARCH

United States cases: 393k[add key number]

SUBCHAPTER II—STANDARDS AND COMPLIANCE

§ 30111. Standards

HISTORICAL AND STATUTORY NOTES

Improving Criteria Used in a Recall

Pub.L. 106-414, § 15, Nov. 1, 2000, 114 Stat. 1808, provided that:

"(a) Review of standards and criteria used in opening a defect or noncompliance investigation.—The Secretary shall, not later than 30 days after the date of the enactment of this Act [Nov. 1, 2000], undertake a comprehensive review of all standards, criteria, procedures, and methods, including data management and analysis used by the National Highway Traffic Safety Administration in determining whether to open a defect or noncompliance investigation pursuant to subchapter II or IV of chapter 301 of title 49,

United States Code [this subchapter or 49 U.S.C.A. § 30161 et seq.], and shall undertake such steps as may be necessary to update and improve such standards, criteria, procedures, or methods, including data management and analysis.

"(b) Report to Congress.—Not later than 1 year after the date of the enactment of this Act [Nov. 1, 2000], the Secretary shall transmit to the Committee on Commerce of the House of Representatives and the Committee on Commerce, Science, and Transportation of the Senate a report describing the Secretary's findings and actions under subsection (a)."

§ 30113. General exemptions

[See main volume for text of (a)]

(b) Authority to exempt and procedures.—(1) The Secretary of Transportation may exempt, on a temporary basis, motor vehicles from a motor vehicle safety standard prescribed under this chapter [49 U.S.C.A. § 30101 et seq.] or passenger motor vehicles from a bumper standard prescribed under chapter 325 of this title [49 U.S.C.A. § 32501 et seq.], on terms the Secretary considers appropriate. An exemption may be renewed. A renewal may be granted only on reapplication and must conform to the requirements of this subsection.

[See main volume for text of (2)]

(3) The Secretary may act under this subsection on finding that—

(A) an exemption is consistent with the public interest and this chapter [49 U.S.C.A. § 30101 et seq.] or chapter 325 of this title (as applicable) [49 U.S.C.A. § 32501 et seq.]; and

[See main volume for text of (B)]

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Office of the Secretary of Transportation

§ 1.50

(ff) Exercise the authority vested in the Secretary by the Crime Control Act of 1990 (Pub. L. 101-647) as it relates to a railroad police officer's authority to enforce the laws of any jurisdiction in which the police officer's rail carrier employer owns property.

(gg) Carry out the functions vested in the Secretary by sections 16 and 21 of the Hazardous Materials Transportation Uniform Safety Act of 1990 (Pub. L. 101-615; 104 Stat. 3244 (49 App. U.S.C. 1813 note and 1817 note)).

(hh) Exercise the authority vested in the Secretary by Section 601 (d) and (e) of the National and Community Service Act of 1990 (45 U.S.C. 546 note) as it relates to the discharge of human waste from railroad passenger cars.

(ii) Carry out the functions and exercise the authority delegated to the Secretary in section 2(d)(2) of Executive Order 12777 (3 CFR, 1991 Comp.: 56 FR 54757), with respect to rail transportation, relating to the approval of means to ensure the availability of private personnel and equipment to remove, to the maximum extent practicable, a worst case discharge, the review and approval of response plans, and the authorization of railroads, subject to the Federal Water Pollution Control Act (33 U.S.C. 1321), to operate without approved response plans, except as delegated in § 1.46(m).

(jj) Exercise the authority vested in the Secretary by the Swift Rail Development Act of 1994, being Title I—High-Speed Rail of Public Law 103-440 (108 Stat. 4615), as it relates to the provision of financial assistance for high-speed rail corridor planning and technology improvements, the promulgation of necessary safety regulations, and the redemption of outstanding obligations and liabilities with respect to the Columbus and Greenville Railway under Sections 505 and 511 of the Railroad Revitalization and Regulatory Reform Act of 1976 (45 U.S.C. 825 and 831, respectively).

(kk) Carry out the functions and exercise the authority vested in the Secretary by 23 U.S.C. 322, titled the Magnetic Levitation Transportation Technology Deployment Program.

(ll) Carry out the function of determining the Federal requirements for the Nationwide Differential Global Po-

sitioning System (NDGPS) as a necessary part of the Secretary's authority to establish, operate, and manage the NDGPS granted by Section 346 of Public Law 105-66, titled the Department of Transportation and Related Agencies Appropriations Act, 1998.

[Amdt. 1-113, 40 FR 43901, Sept. 24, 1975]

EDITORIAL NOTE: For FEDERAL REGISTER citations affecting § 1.49, see the List of CFR Sections Affected in the Finding Aids section of this volume.

§ 1.50 Delegation to the National Highway Traffic Safety Administrator.

The National Highway Traffic Safety Administrator is delegated authority to:

(a) Carry out the National Traffic and Motor Vehicle Safety Act of 1966, as amended (15 U.S.C. 1381 *et seq.*).

(b) Carry out the Highway Safety Act of 1966, as amended (23 U.S.C. 401 *et seq.*), except for highway safety programs, research and development relating to highway design, construction and maintenance, traffic control devices, identification and surveillance of accident locations, and highway-related aspects of pedestrian and bicycle safety.

(c) Exercise the authority vested in the Secretary by section 210(2) of the Clean Air Act, as amended (42 U.S.C. 7544(2)).

(d) Exercise the authority vested in the Secretary by section 204(b) of the Federal Railroad Safety Act of 1970 (45 U.S.C. 433(b)) with respect to laws administered by the National Highway Traffic Safety Administrator pertaining to highway, traffic and motor vehicle safety.

(e) Carry out the Act of July 14, 1960, as amended (23 U.S.C. 313 note) and the National Driver Register Act of 1982 (23 U.S.C. 401 note).

(f) Carry out the functions vested in the Secretary by the Motor Vehicle Information and Cost Savings Act of 1972, as amended (15 U.S.C. 1901 *et seq.*), except section 512.

(g) Administer the following sections of title 23, United States Code, with the concurrence of the Federal Highway Administrator:

(1) 141, as it relates to certification of the enforcement of speed limits:

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(2) 154 (a), (b), (d), (e), (f), (g) and (h); and

(3) 158.

(h) Carry out the consultation functions vested in the Secretary by Executive Order 11912, as amended.

(i) Carry out section 209 of the Surface Transportation Assistance Act of 1978, as amended (23 U.S.C. 401 note) and section 165 of the Surface Transportation Assistance Act of 1982, as amended (23 U.S.C. 101 note), with respect to matters within the primary responsibility of the National Highway Traffic Safety Administrator.

(j) Administer section 414(b)(1) of the Surface Transportation Assistance Act of 1982, as amended (49 U.S.C. 2314) with the concurrence of the Federal Highway Administrator, and section 414(b)(2).

(k) Carry out section 2(c) of the Truth in Mileage Act of 1986 (15 U.S.C. 1988 note).

(l) Carry out section 204(b) of the Surface Transportation and Uniform Relocation Assistance Act of 1987, Public Law 100-17 (101 Stat. 132) with the coordination of the Federal Highway Administrator.

(m) Carry out the functions vested in the Secretary by section 15(f) of the Sanitary Food Transportation Act of 1990 (Pub. L. 101-500; 104 Stat. 1213).

(n) Carry out, in coordination with the Federal Motor Carrier Safety Administrator, the authority vested in the Secretary by subchapter III of chapter 311 and section 31502 of title 49, U.S.C., to promulgate safety standards for commercial motor vehicles and equipment subsequent to initial manufacture when the standards are based upon and similar to a Federal Motor Vehicle Safety Standard promulgated, either simultaneously or previously, under chapter 301 of title 49, U.S.C.

[Amdt. 1-226, 53 FR 23122, June 20, 1988, as amended by Amdt. 1-239, 56 FR 6810, Feb. 20, 1991; 65 FR 41015, July 3, 2000]

§ 1.51 Delegations to Urban Mass Transportation Administrator.

The Urban Mass Transportation Administrator is delegated authority to exercise the functions vested in the Secretary by:

(a) The Urban Mass Transportation Act of 1964, as amended (78 Stat. 302, 49

U.S.C. 1601 *et seq.*), except section 18 as it relates to the formula grant program for non-urbanized areas in the Commonwealth of Puerto Rico and section 22, relating to intercity bus service.

(b) Section 1 of Reorganization Plan No. 2 of 1968 (84 Stat. 1369).

(c) Section 10 of the Urban Mass Transportation Assistance Act of 1970, Public Law 91-453, 84 Stat. 962, 968.

(d) Sections 3 and 9 through 15 of the National Capital Transportation Assistance Act of 1969, as amended (D.C. Code, § 1-2441 *et seq.*).

(e) The following sections of title 23, United States Code:

(1) 103 as it involves the withdrawal of Interstate routes and the substitution of non-highway public mass transit projects authorized by subsection (e)(4);

(2) 101(a) as it involves approval of boundaries of urban and urbanized areas, 104(f)(4), 105(d), 106(b) as it involves the Federal-aid urban system, and 134; and

(3) 101 (b), (c), (d), and (e); 105 (a) and (g); 106 (a), (c) and (d); 108; 109 (a), (g), and (h); 110; 112; 113; 114; 116 (a) and (c); 117; 121; 122; 124; 128; 140(a); 142; and 145 as they involve mass transportation projects authorized by sections 103(e)(4), 142(a)(2), or 142(c).

(f) Sections 140, 146, 147, 164 and 165 of the Federal-Aid Highway Act of 1973, as amended (Pub. L. 93-87, title I, 87 Stat. 250; Pub. L. 93-643, 88 Stat. 2281).

(g) Section 813 of the Housing and Community Development Act of 1974 (Pub. L. 93-383).

(h) Section 107 of the National Mass Transportation Assistance Act of 1974 (Pub. L. 93-503, November 26, 1974).

(i) Title II of the National Mass Transportation Assistance Act of 1974 (Pub. L. 93-503, November 26, 1974), except sections 204 and 205.

(j) Sections 804, insofar as it relates to 45 U.S.C. 744(e)(5); and 805, as applicable, of the Railroad Revitalization and Regulatory Reform Act of 1976 (Pub. L. 94-210).

(k) Section 148 of the Federal-Aid Highway Act of 1976 (Pub. L. 94-280, 90 Stat. 425).

(l) The following sections of the Surface Transportation Assistance Act of 1978 (Pub. L. 95-599, 92 Stat. 2689): 155, 316, 320, and title IV, as amended (as it

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Nat'l Highway Traffic Safety Admin., DOT

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December 1, 1999, may be used by the National Highway Traffic Safety Administration to test the suppression system of a vehicle that has been certified as being in compliance with 49 CFR Part 571.208 S19. When the restraint system comes equipped with a removable base, the test may be run either with the base attached or without the base.

Britax Handle with Care 191
Century 560 Institutional 4590
Century Smart Fit 4541
Cosco Arriva 02-750
Cosco Turnabout 02-772
Evenflo Discovery 209
Evenflo First Choice 204
Evenflo On My Way 207
Evenflo Position Right 200
Graco Infant 8457
Kolcraft Secura 43924

C. Any of the following forward-facing convertible child restraint systems, manufactured on or after December 1, 1999, may be used by the National Highway Traffic Safety Administration to test the suppression system of a vehicle that has been certified as being in compliance with 49 CFR Part 571.208 S19, or S21:

Britax Roundabout 161
Century Encore 4612
Cosco Touriva 02-584
Evenflo Champion 249
Evenflo Medallion 254
Fisher Price Safe-Embrace 79701
Kolcraft Performa 23308

D. Any of the following forward-facing toddler/belt positioning booster systems, manufactured on or after December 1, 1999, may be used by the National Highway Traffic Safety Administration as test devices to test the suppression system of a vehicle that has been certified as being in compliance with 49 CFR Part 571.208 S21 or S23:

Britax Cruiser 121
Century Next Step 4920
Cosco High Back Booster 02-442
Evenflo Right Fit 245

[36 FR 22902, Dec. 2, 1971]

EDITORIAL NOTE: For FEDERAL REGISTER citations affecting § 571.208, see the List of CFR Sections Affected in the Finding Aids section of this volume.

§ 571.209 Standard No. 209; Seat belt assemblies.

S1. *Purpose and scope.* This standard specifies requirements for seat belt assemblies.

S2. *Application.* This standard applies to seat belt assemblies for use in passenger cars, multipurpose passenger vehicles, trucks, and buses.

S3. *Definitions.* *Adjustment hardware* means any or all hardware designed for

adjusting the size of a seat belt assembly to fit the user, including such hardware that may be integral with a buckle, attachment hardware, or retractor.

Attachment hardware means any or all hardware designed for securing the webbing of a seat belt assembly to a motor vehicle.

Automatic-locking retractor means a retractor incorporating adjustment hardware by means of a positive self-locking mechanism which is capable when locked of withstanding restraint forces.

Buckle means a quick release connector which fastens a person in a seat belt assembly.

Emergency-locking retractor means a retractor incorporating adjustment hardware by means of a locking mechanism that is activated by vehicle acceleration, webbing movement relative to the vehicle, or other automatic action during an emergency and is capable when locked of withstanding restraint forces.

Hardware means any metal or rigid plastic part of a seat belt assembly.

Load-limiter means a seat belt assembly component or feature that controls tension on the seat belt to modulate the forces that are imparted to occupants restrained by the belt assembly during a crash.

Nonlocking retractor means a retractor from which the webbing is extended to essentially its full length by a small external force, which provides no adjustment for assembly length, and which may or may not be capable of sustaining restraint forces at maximum webbing extension.

Pelvic restraint means a seat belt assembly or portion thereof intended to restrain movement of the pelvis.

Retractor means a device for storing part or all of the webbing in a seat belt assembly.

Seat back retainer means the portion of some seat belt assemblies designed to restrict forward movement of a seat back.

Seat belt assembly means any strap, webbing, or similar device designed to secure a person in a motor vehicle in order to mitigate the results of any accident, including all necessary buckles and other fasteners, and all hardware

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designed for installing such seat belt assembly in a motor vehicle.

Strap means a narrow nonwoven material used in a seat belt assembly in place of webbing.

Type 1 seat belt assembly is a lap belt for pelvic restraint.

Type 2 seat belt assembly is a combination of pelvic and upper torso restraints.

Type 2a shoulder belt is an upper torso restraint for use only in conjunction with a lap belt as a Type 2 seat belt assembly.

Upper torso restraint means a portion of a seat belt assembly intended to restrain movement of the chest and shoulder regions.

Webbing means a narrow fabric woven with continuous filling yarns and finished selvages.

S4. Requirements.

S4.1 (a) *Single occupancy.* A seat belt assembly shall be designed for use by one, and only one, person at any one time.

(b) [Reserved]

(c) *Upper torso restraint.* A Type 2 seat belt assembly shall provide upper torso restraint without shifting the pelvic restraint into the abdominal region. An upper torso restraint shall be designed to minimize vertical forces on the shoulders and spine. Hardware for upper torso restraint shall be so designed and located in the seat belt assembly that the possibility of injury to the occupant is minimized.

A Type 2a shoulder belt shall comply with applicable requirements for a Type 2 seat belt assembly in S4.1 to S4.4, inclusive.

(d) *Hardware.* All hardware parts which contact under normal usage a person, clothing, or webbing shall be free from burrs and sharp edges.

(e) *Release.* A Type 1 or Type 2 seat belt assembly shall be provided with a buckle or buckles readily accessible to the occupant to permit his easy and rapid removal from the assembly. Buckle release mechanism shall be designed to minimize the possibility of accidental release. A buckle with release mechanism in the latched position shall have only one opening in which the tongue can be inserted on the end of the buckle designed to receive and latch the tongue.

(f) *Attachment hardware.* A seat belt assembly shall include all hardware necessary for installation in a motor vehicle in accordance with Society of Automotive Engineers Recommended Practice J800c, "Motor Vehicle Seat Belt Installation," November 1973. However, seat belt assemblies designed for installation in motor vehicles equipped with seat belt assembly anchorages that do not require anchorage nuts, plates, or washers, need not have such hardware, but shall have 1/8-20 UNF-2A or 1/2-13UNC-2A attachment bolts or equivalent metric hardware. The hardware shall be designed to prevent attachment bolts and other parts from becoming disengaged from the vehicle while in service. Reinforcing plates or washers furnished for universal floor, installations shall be of steel, free from burrs and sharp edges on the peripheral edges adjacent to the vehicle, at least 1.5 mm in thickness and at least 2580 mm² in projected area. The distance between any edge of the plate and the edge of the bolt hole shall be at least 15 mm. Any corner shall be rounded to a radius of not less than 6 mm or cut so that no corner angle is less than 135° and no side is less than 6 mm in length.

(g) *Adjustment.* (1) A Type 1 or Type 2 seat belt assembly shall be capable of adjustment to fit occupants whose dimensions and weight range from those of a 5th-percentile adult female to those of a 95th-percentile adult male. The seat belt assembly shall have either an automatic-locking retractor, an emergency-locking retractor, or an adjusting device that is within the reach of the occupant.

(2) A Type 1 or Type 2 seat belt assembly for use in a vehicle having seats that are adjustable shall conform to the requirements of S4.1(g)(1) regardless of seat position. However, if a seat has a back that is separately adjustable, the requirements of S4.1(g)(1) need be met only with the seat back in the manufacturer's nominal design riding position.

(3) The adult occupants referred to in S4.1(g)(1) shall have the following measurements:

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	5th percent-ile adult female	95th percentile adult male
Weight	46.3 kg	97.5 kg.
Erect sitting height	765 mm	965 mm.
Hip breadth (sitting)	325 mm	419 mm.
Hip circumference (sit- ting)	925 mm	1199 mm.
Waist circumference (sitting)	599 mm	1080 mm.
Chest depth	190 mm	267 mm.
Chest circumference:		
Nipple	775 mm	1130 mm.
Upper	757 mm	1130 mm.
Lower	676 mm	1130 mm.

(h) *Webbing.* The ends of webbing in a seat belt assembly shall be protected or treated to prevent raveling. The end of webbing in a seat belt assembly having a metal-to-metal buckle that is used by the occupant to adjust the size of the assembly shall not pull out of the adjustment hardware at maximum size adjustment. Provision shall be made for essentially unimpeded movement of webbing routed between a seat back and seat cushion and attached to a retractor located behind the seat.

(i) *Strap.* A strap used in a seat belt assembly to sustain restraint forces shall comply with the requirements for webbing in S4.2, and if the strap is made from a rigid material, it shall comply with applicable requirements in S4.2, S4.3, and S4.4.

(j) *Marking.* Each seat belt assembly shall be permanently and legibly marked or labeled with year of manufacture, model, and name or trademark of manufacturer or distributor, or of importer if manufactured outside the United States. A model shall consist of a single combination of webbing having a specific type of fiber weave and construction, and hardware having a specific design. Webbing of various colors may be included under the same model, but webbing of each color shall comply with the requirements for webbing in S4.2.

(k) *Installation instructions.* A seat belt assembly, other than a seat belt assembly installed in a motor vehicle by an automobile manufacturer, shall be accompanied by an instruction sheet providing sufficient information for installing the assembly in a motor vehicle. The installation instructions shall state whether the assembly is for universal installation or for installation only in specifically stated motor vehicles, and shall include at least those

items specified in SAE Recommended Practice J800c, "Motor Vehicle Seat Belt Installations," November 1973. If the assembly is for use only in specifically stated motor vehicles, the assembly shall either be permanently and legibly marked or labeled with the following statement, or the instruction sheet shall include the following statement:

This seat belt assembly is for use only in [insert specific seating position(s), e.g., "front right"] in [insert specific vehicle make(s) and model(s)].

(l) *Usage and maintenance instructions.* A seat belt assembly or retractor shall be accompanied by written instructions for the proper use of the assembly, stressing particularly the importance of wearing the assembly snugly and properly located on the body, and on the maintenance of the assembly and periodic inspection of all components. The instructions shall show the proper manner of threading webbing in the hardware of seat belt assemblies in which the webbing is not permanently fastened. Instructions for a nonlocking retractor shall include a caution that the webbing must be fully extended from the retractor during use of the seat belt assembly unless the retractor is attached to the free end of webbing which is not subjected to any tension during restraint of an occupant by the assembly. Instructions for Type 2a shoulder belt shall include a warning that the shoulder belt is not to be used without a lap belt.

(m) *Workmanship.* Seat belt assemblies shall have good workmanship in accordance with good commercial practice.

S4.2 Requirements for webbing.

(a) *Width.* The width of the webbing in a seat belt assembly shall be not less than 46 mm, except for portions that do not touch a 95th percentile adult male with the seat in any adjustment position and the seat back in the manufacturer's nominal design riding position when measured under the conditions prescribed in S5.1(a).

(b) *Breaking strength.* The webbing in a seat belt assembly shall have not less than the following breaking strength when tested by the procedures specified in S5.1(b): Type 1 seat belt assembly—26,689 N; Type 2 seat belt assembly—

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22,241 N for webbing in pelvic restraint and 17,793 N for webbing in upper torso restraint.

(c) *Elongation.* Except as provided in S4.5, the webbing in a seat belt assembly shall not extend to more than the following elongation when subjected to the specified forces in accordance with the procedure specified in S5.1(c): Type 1 seat belt assembly—20 percent at 11,120 N; Type 2 seat belt assembly 30 percent at 11,120 N for webbing in pelvic restraint and 40 percent at 11,120 N for webbing in upper torso restraint.

(d) *Resistance to abrasion.* The webbing of a seat belt assembly, after being subjected to abrasion as specified in S5.1(d) or S5.3(c), shall have a breaking strength of not less than 75 percent of the breaking strength listed in S4.2(b) for that type of belt assembly.

(e) *Resistance to light.* The webbing in a seat belt assembly after exposure to the light of a carbon arc and tested by the procedure specified in S5.1(e) shall have a breaking strength not less than 60 percent of the strength before exposure to the carbon arc and shall have a color retention not less than No. 2 on the Geometric Gray Scale published by the American Association of Textile Chemists and Colorists, Post Office Box 886, Durham, NC.

(f) *Resistance to micro-organisms.* The webbing in a seat belt assembly after being subjected to micro-organisms and tested by the procedures specified in S5.1(f) shall have a breaking strength not less than 85 percent of the strength before subjection to micro-organisms.

S4.3 Requirements for hardware.

(a) *Corrosion resistance.* (1) Attachment hardware of a seat belt assembly after being subjected to the conditions specified in S5.2(a) shall be free of ferrous corrosion on significant surfaces except for permissible ferrous corrosion at peripheral edges or edges of holes on underfloor reinforcing plates and washers. Alternatively, such hardware at or near the floor shall be protected against corrosion by at least an electrodeposited coating of nickel, or copper and nickel with at least a service condition number of SC2, and other attachment hardware shall be protected by an electrodeposited coating of nickel, or copper and nickel with a

service condition number of SC1, in accordance with American Society for Testing and Materials B456-79, "Standard Specification for Electrodeposited Coatings of Copper Plus Nickel Plus Chromium and Nickel Plus Chromium," but such hardware shall not be racked for electroplating in locations subjected to maximum stress.

(2) Surfaces of buckles, retractors and metallic parts, other than attachment hardware, of a seat belt assembly after subjection to the conditions specified in S5.2(a) shall be free of ferrous or nonferrous corrosion which may be transferred, either directly or by means of the webbing, to the occupant or his clothing when the assembly is worn. After test, buckles shall conform to applicable requirements in paragraphs (d) to (g) of this section.

(b) *Temperature resistance.* Plastic or other nonmetallic hardware parts of a seat belt assembly when subjected to the conditions specified in S5.2(b) shall not warp or otherwise deteriorate to cause the assembly to operate improperly or fail to comply with applicable requirements in this section and S4.4.

(c) *Attachment hardware.* (1) Eye bolts, shoulder bolts, or other bolt used to secure the pelvic restraint of seat belt assembly to a motor vehicle shall withstand a force of 40,034 N when tested by the procedure specified in S5.2(c)(1), except that attachment bolts of a seat belt assembly designed for installation in specific models of motor vehicles in which the ends of two or more seat belt assemblies cannot be attached to the vehicle by a single bolt shall have breaking strength of not less than 22,241 N.

(2) Other attachment hardware designed to receive the ends of two seat belt assemblies shall withstand a tensile force of at least 26,689 N without fracture of a section when tested by the procedure specified in S5.2(c)(2).

(3) A seat belt assembly having single attachment hooks of the quick-disconnect type for connecting webbing to an eye bolt shall be provided with a retaining latch or keeper which shall not move more than 2 mm in either the vertical or horizontal direction when tested by the procedure specified in S5.2(c)(3).

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(d) *Buckle release.* (1) The buckle of a Type 1 or Type 2 seat belt assembly shall release when a force of not more than 133 N is applied.

(2) A buckle designed for pushbutton application of buckle release force shall have a minimum area of 452 mm² with a minimum linear dimension of 10 mm for applying the release force, or a buckle designed for lever application of buckle release force shall permit the insertion of a cylinder 10 mm in diameter and 38 mm in length to at least the midpoint of the cylinder along the cylinder's entire length in the actuation portion of the buckle release. A buckle having other design for release shall have adequate access for two or more fingers to actuate release.

(3) The buckle of a Type 1 or Type 2 seat belt assembly shall not release under a compressive force of 1779 N applied as prescribed in paragraph S5.2(d)(3). The buckle shall be operable and shall meet the applicable requirement of paragraph S4.4 after the compressive force has been removed.

(e) *Adjustment force.* The force required to decrease the size of a seat belt assembly shall not exceed 49 N when measured by the procedure specified in S5.2(e).

(f) *Tilt-lock adjustment.* The buckle of a seat belt assembly having tilt-lock adjustment shall lock the webbing when tested by the procedure specified in S5.2(f) at an angle of not less than 30 degrees between the base of the buckle and the anchor webbing.

(g) *Buckle latch.* The buckle latch of a seat belt assembly when tested by the procedure specified in S5.2(g) shall not fail, nor gall or wear to an extent that normal latching and unlatching is impaired, and a metal-to-metal buckle shall separate when in any position of partial engagement by a force of not more than 22 N.

(h) *Nonlocking retractor.* The webbing of a seat belt assembly shall extend from a nonlocking retractor within 6 mm of maximum length when a tension is applied as prescribed in S5.2(h). A nonlocking retractor on upper torso restraint shall be attached to the non-adjustable end of the assembly, the reel of the retractor shall be easily visible to an occupant while wearing the assembly, and the maximum retraction

force shall not exceed 5 N in any strap or webbing that contacts the shoulder when measured by the procedure specified in S5.2(h), unless the retractor is attached to the free end of webbing which is not subjected to any tension during restraint of an occupant by the assembly.

(i) *Automatic-locking retractor.* The webbing of a seat belt assembly equipped with an automatic locking retractor, when tested by the procedure specified in S5.2(i), shall not move more than 25 mm between locking positions of the retractor, and shall be retracted with a force under zero acceleration of not less than 3 N when attached to pelvic restraint, and not less than 2 N nor more than 5 N in any strap or webbing that contacts the shoulders of an occupant when the retractor is attached to upper torso restraint. An automatic locking retractor attached to upper torso restraint shall not increase the restraint on the occupant of the seat belt assembly during use in a vehicle traveling over rough roads as prescribed in S5.2(i).

(j) *Emergency-locking retractor.* An emergency-locking retractor of a Type 1 or Type 2 seat belt assembly, when tested in accordance with the procedures specified in paragraph S5.2(j)—

(1) Shall lock before the webbing extends 25 mm when the retractor is subjected to an acceleration of 7 m/s² (0.7 g);

(2) Shall not lock, if the retractor is sensitive to webbing withdrawal, before the webbing extends 51 mm when the retractor is subjected to an acceleration of 3 m/s² (0.3 g) or less.

(3) Shall not lock, if the retractor is sensitive to vehicle acceleration, when the retractor is rotated in any direction to any angle of 15° or less from its orientation in the vehicle;

(4) Shall exert a retractive force of at least 3 N under zero acceleration when attached only to the pelvic restraint;

(5) Shall exert a retractive force of not less than 1 N and not more than 5 N under zero acceleration when attached only to an upper torso restraint;

(6) Shall exert a retractive force of not less than 1 N and not more than 7

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N under zero acceleration when attached to a strap or webbing that restrains both the upper torso and the pelvis.

(k) *Performance of retractor.* A retractor used on a seat belt assembly after subjection to the tests specified in S5.2(k) shall comply with applicable requirements in paragraphs (h) to (j) of this section and S4.4, except that the retraction force shall be not less than 50 percent of its original retraction force.

S4.4 Requirements for assembly performance.

(a) *Type 1 seat belt assembly.* Except as provided in S4.5, the complete seat belt assembly including webbing, straps, buckles, adjustment and attachment hardware, and retractors shall comply with the following requirements when tested by the procedures specified in S5.3(a):

(1) The assembly loop shall withstand a force of not less than 22,241 N; that is, each structural component of the assembly shall withstand a force of not less than 11,120 N.

(2) The assembly loop shall extend not more than 7 inches or 178 mm when subjected to a force of 22,241 N; that is, the length of the assembly between anchorages shall not increase more than 356 mm.

(3) Any webbing cut by the hardware during test shall have a breaking strength at the cut of not less than 18,683 N.

(4) Complete fracture through any solid section of metal attachment hardware shall not occur during test.

(b) *Type 2 seat belt assembly.* Except as provided in S4.5, the components of a Type 2 seat belt assembly including webbing, straps, buckles, adjustment and attachment hardware, and retractors shall comply with the following requirements when tested by the procedure specified in S5.3(b):

(1) The structural components in the pelvic restraint shall withstand a force of not less than 11,120 N.

(2) The structural components in the upper torso restraint shall withstand a force of not less than 6,672 N.

(3) The structural components in the assembly that are common to pelvic and upper torso restraints shall withstand a force of not less than 13,345 N.

(4) The length of the pelvic restraint between anchorages shall not increase more than 508 mm when subjected to a force of 11,120 N.

(5) The length of the upper torso restraint between anchorages shall not increase more than 508 mm when subjected to a force of 6,672 N.

(6) Any webbing cut by the hardware during test shall have a breaking strength of not less than 15,569 N at a cut in webbing of the pelvic restraint, or not less than 12,455 N at a cut in webbing of the upper torso restraint.

(7) Complete fracture through any solid section of metal attachment hardware shall not occur during test.

S4.5 Load-limiter. (a) A Type 1 or Type 2 seat belt assembly that includes a load-limiter is not required to comply with the elongation requirements of S4.2(c), S4.4(a)(2), S4.4(b)(4) or S4.4(b)(5).

(b) A seat belt assembly that includes a load limiter and that does not comply with the elongation requirements of this standard may be installed in motor vehicles at any designated seating position that is subject to the requirements of S5.1 of Standard No. 208 (§ 571.208).

S4.6 Manual belts subject to crash protection requirements of Standard No. 208.

(a)(1) A manual seat belt assembly, which is subject to the requirements of S5.1 of Standard No. 208 (49 CFR 571.208) by virtue of any provision of Standard No. 208 other than S4.1.2.1(c)(2) of that standard, does not have to meet the requirements of S4.2(a)-(f) and S4.4 of this standard.

(2) A manual seat belt assembly subject to the requirements of S5.1 of Standard No. 208 (49 CFR 571.208) by virtue of S4.1.2.1(c)(2) of Standard No. 208 does not have to meet the elongation requirements of S4.2(c), S4.4(a)(2), S4.4(b)(4), and S4.4(b)(5) of this standard.

S5. Demonstration procedures.

S5.1 Webbing—(a) Width. The width of webbing from three seat belt assemblies shall be measured after conditioning for at least 24 hours in an atmosphere having relative humidity between 48 and 67 percent and a temperature of $23^{\circ} \pm 2^{\circ} \text{C}$. The tension during measurement of width shall be not more than 22 N on webbing from a Type

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1 seat belt assembly, and $9786 \text{ N} \pm 450 \text{ N}$ on webbing from a Type 2 seat belt assembly. The width of webbing from a Type 2 seat belt assembly may be measured during the breaking strength test described in paragraph (b) of this section.

(b) *Breaking strength.* Webbing from three seat belt assemblies shall be conditioned in accordance with paragraph (a) of this section and tested for breaking strength in a testing machine of capacity verified to have an error of not more than one percent in the range of the breaking strength of the webbing in accordance with American Society for Testing and Materials E4-79 "Standard Methods of Load Verification of Testing Machines." The machine shall be equipped with split drum grips illustrated in Figure 1, having a diameter between 51 and 102 mm. The rate of grip separation shall be between 51 and 102 mm per minute. The distance between the centers of the grips at the start of the test shall be between 102 and 254 mm. After placing the specimen in the grips, the webbing shall be stretched continuously at a uniform rate to failure. Each value shall be not less than the applicable breaking strength requirement in S4.2(b), but the median value shall be used for determining the retention of breaking strength in paragraphs (d), (e) and (f) of this section.

(c) *Elongation.* Elongation shall be measured during the breaking strength test described in paragraph (b) of this section by the following procedure: A preload between 196 N and 245 N shall be placed on the webbing mounted in the grips of the testing machine and the needle points of an extensometer, in which the points remain parallel during test, are inserted in the center of the specimen. Initially the points shall be set at a known distance apart between 102 and 203 mm. When the force on the webbing reaches the value specified in S4.2(c), the increase in separation of the points of the extensometer shall be measured and the percent elongation shall be calculated to the nearest 0.5 percent. Each value shall be not more than the appropriate elongation requirement in S4.2(c).

(d) *Resistance to abrasion.* The webbing from three seat belt assemblies

shall be tested for resistance to abrasion by rubbing over the hexagon bar prescribed in Figure 2 in the following manner: The webbing shall be mounted in the apparatus shown schematically in Figure 2. One end of the webbing (A) shall be attached to a mass (B) of $2.35 \text{ kg} \pm .05 \text{ kg}$, except that a mass of $1.5 \text{ kg} \pm .05 \text{ kg}$ shall be used for webbing in pelvic and upper torso restraints of a belt assembly used in a child restraint system. The webbing shall be passed over the two new abrading edges of the hexagon bar (C) and the other end attached to an oscillating drum (D) which has a stroke of 330 mm. Suitable guides shall be used to prevent movement of the webbing along the axis of hexagonal bar C. Drum D shall be oscillated for 5,000 strokes or 2,500 cycles at a rate of 60 ± 2 strokes per minute or 30 ± 1 cycles per minute. The abraded webbing shall be conditioned as prescribed in paragraph (a) of this section and tested for breaking strength by the procedure described in paragraph (b) of this section. The median values for the breaking strengths determined on abraded and unabraded specimens shall be used to calculate the percentage of breaking strength retained.

(e) *Resistance to light.* Webbing at least 508 mm in length from three seat belt assemblies shall be suspended vertically on the inside of the specimen track in a Type E carbon-arc light exposure apparatus described in Standard Practice for Generating Light-Exposure Apparatus (Carbon-Arc Type) With and Without Water for Exposure of Nonmetallic Materials, ASTM Designation: G23 81, published by the American Society for Testing and Materials, except that the filter used for 100 percent polyester yarns shall be chemically strengthened soda-lime glass with a transmittance of less than 5 percent for wave lengths equal to or less than 305 nanometers and 90 percent or greater transmittance for wave lengths of 375 to 800 nanometers. The apparatus shall be operated without water spray at an air temperature of $60^\circ \pm 2^\circ \text{Celsius}$ ($^\circ \text{C}$) measured at a point $25 \pm 5 \text{ mm}$ outside the specimen rack and midway in height. The temperature sensing element shall be shielded from radiation. The specimens

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shall be exposed to light from the carbon-arc for 100 hours and then conditioned as prescribed in paragraph (a) of this section. The colorfastness of the exposed and conditioned specimens shall be determined on the Geometric Gray Scale issued by the American Association of Textile Chemists and Colorists. The breaking strength of the specimens shall be determined by the procedure prescribed in paragraph (b) of this section. The median values for the breaking strengths determined on exposed and unexposed specimens shall be used to calculate the percentage of breaking strength retained.

(f) *Resistance to micro-organisms.* Webbing at least 508 millimeters (mm) in length from three seat belt assemblies shall first be preconditioned in accordance with Appendix A(1) and (2) of American Association of Textile Chemists and Colorists Test Method 381, "Fungicides Evaluation on Textiles: Mildew and Rot Resistance of Textiles," and then subjected to Test 1, "Soil Burial Test" of that test method. After soil-burial for a period of 2 weeks, the specimen shall be washed in water, dried and conditioned as prescribed in paragraph (a) of this section. The breaking strengths of the specimens shall be determined by the procedure prescribed in paragraph (b) of this section. The median values for the breaking strengths determined on exposed and unexposed specimens shall be used to calculate the percentage of breaking strength retained.

NOTE: This test shall not be required on webbing made from material which is inherently resistant to micro-organisms.

S5.2 Hardware.

(a) *Corrosion resistance.* Three seat belt assemblies shall be tested in accordance with American Society for Testing and Materials B11773, "Standard Method of Salt Spray (Fog) Testing." Any surface coating or material not intended for permanent retention on the metal parts during service life shall be removed prior to preparation of the test specimens for testing. The period of test shall be 50 hours for all attachment hardware at or near the floor, consisting of two periods of 24 hours exposure to salt spray followed by 1 hour drying and 25 hours for all other hardware, consisting of one pe-

riod of 24 hours exposure to salt spray followed by 1 hour drying. In the salt spray test chamber, the parts from the three assemblies shall be oriented differently, selecting those orientations most likely to develop corrosion on the larger areas. At the end of test, the seat belt assembly shall be washed thoroughly with water to remove the salt. After drying for at least 24 hours under standard laboratory conditions specified in S5.1(a) attachment hardware shall be examined for ferrous corrosion on significant surfaces, that is, all surfaces that can be contacted by a sphere 19 mm in diameter, and other hardware shall be examined for ferrous and nonferrous corrosion which may be transferred, either directly or by means of the webbing, to a person or his clothing during use of a seat belt assembly incorporating the hardware.

NOTE: When attachment and other hardware are permanently fastened, by sewing or other means, to the same piece of webbing, separate assemblies shall be used to test the two types of hardware. The test for corrosion resistance shall not be required for attachment hardware made from corrosion-resistant steel containing at least 11.5 percent chromium or for attachment hardware protected with an electrodeposited coating of nickel, or copper and nickel, as prescribed in S4.3(a). The assembly that has been used to test the corrosion resistance of the buckle shall be used to measure adjustment force, tilt-lock adjustment, and buckle latch in paragraphs (e), (f), and (g), respectively, of this section, assembly performance in S5.3 and buckle release force in paragraph (d) of this section.

(b) *Temperature resistance.* Three seat belt assemblies having plastic or non-metallic hardware or having retractors shall be subjected to the conditions prescribed in Procedure D of American Society for Testing and Materials D756-78, "Standard Practice for Determination of Weight and Shape Changes of Plastics under Accelerated Service Conditions." The dimension and weight measurement shall be omitted. Buckles shall be unlatched and retractors shall be fully retracted during conditioning. The hardware parts after conditioning shall be used for all applicable tests in S4.3 and S4.4.

(c) *Attachment hardware.* (1) Attachment bolts used to secure the pelvic restraint of a seat belt assembly to a

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motor vehicle shall be tested in a manner similar to that shown in Figure 3. The load shall be applied at an angle of 45° to the axis of the bolt through attachment hardware from the seat belt assembly, or through a special fixture which simulates the loading applied by the attachment hardware. The attachment hardware or simulated fixture shall be fastened by the bolt to the anchorage shown in Figure 3, which has a standard 1/4-20UNF-2B or 1/2-UNF-2B or metric equivalent threaded hole in a hardened steel plate at least 10 mm in thickness. The bolt shall be installed with two full threads exposed from the fully seated position. The appropriate force required by S4.3(c) shall be applied. A bolt from each of three seat belt assemblies shall be tested.

(2) Attachment hardware, other than bolts, designed to receive the ends of two seat belt assemblies shall be subjected to a tensile force of 26,689 N in a manner simulating use. The hardware shall be examined for fracture after the force is released. Attachment hardware from three seat belt assemblies shall be tested.

(3) Single attachment hook for connecting webbing to any eye bolt shall be tested in the following manner: The hook shall be held rigidly so that the retainer latch or keeper, with cotter pin or other locking device in place, is in a horizontal position as shown in Figure 4. A force of 667 N \pm 9 N shall be applied vertically as near as possible to the free end of the retainer latch, and the movement of the latch by this force at the point of application shall be measured. The vertical force shall be released, and a force of 667 N \pm 9 N shall be applied horizontally as near as possible to the free end of the retainer latch. The movement of the latch by this force at the point of load application shall be measured. Alternatively, the hook may be held in other positions, provided the forces are applied and the movements of the latch are measured at the points indicated in Figure 4. A single attachment hook from each of three seat belt assemblies shall be tested.

(d) *Buckle release.* (1) Three seat belt assemblies shall be tested to determine compliance with the maximum buckle release force requirements, following

the assembly test in S5.3. After subjecting to the force applicable for the assembly being tested, the force shall be reduced and maintained at 667 N on the assembly loop of a Type 1 seat belt assembly, 334 N on the components of a Type 2 seat belt assembly. The buckle release force shall be measured by applying a force on the buckle in a manner and direction typical of those which would be employed by a seat belt occupant. For push button-release buckles, the force shall be applied at least 3 mm from the edge of the push button access opening of the buckle in a direction that produces maximum releasing effect. For lever-release buckles, the force shall be applied on the centerline of the buckle lever or finger tab in a direction that produces maximum releasing effect.

(2) The area for application of release force on pushbutton actuated buckle shall be measured to the nearest 30 mm². The cylinder specified in S4.3(d) shall be inserted in the actuation portion of a lever released buckle for determination of compliance with the requirement. A buckle with other release actuation shall be examined for access of release by fingers.

(3) The buckle of a Type 1 or Type 2 seat belt assembly shall be subjected to a compressive force of 1779 N applied anywhere on a test line that is coincident with the center line of the belt extended through the buckle or on any line that extends over the center of the release mechanism and intersects the extended centerline of the belt at an angle of 60°. The load shall be applied by using a curved cylindrical bar having a cross section diameter of 19 mm and a radius of curvature of 152 mm, placed with its longitudinal center line along the test line and its center directly above the point or the buckle to which the load will be applied. The buckle shall be latched, and a tensile force of 334 N shall be applied to the connected webbing during the application of the compressive force. Buckles from three seat belt assemblies shall be tested to determine compliance with paragraph S4.3(d)(3).

(e) *Adjustment Force.* Three seat belt assemblies shall be tested for adjustment force on the webbing at the buckle, or other manual adjusting device

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normally used to adjust the size of the assembly. With no load on the anchor end, the webbing shall be drawn through the adjusting device at a rate of 508 mm \pm 50 mm per minute and the maximum force shall be measured to the nearest 1 N after the first 25 mm of webbing movement. The webbing shall be precycled 10 times prior to measurement.

(f) *Tilt-lock adjustment.* This test shall be made on buckles or other manual adjusting devices having tilt-lock adjustment normally used to adjust the size of the assembly. Three buckles or devices shall be tested. The base of the adjustment mechanism and the anchor end of the webbing shall be oriented in planes normal to each other. The webbing shall be drawn through the adjustment mechanism in a direction to increase belt length at a rate of 508 mm \pm 50 mm per minute while the plane of the base is slowly rotated in a direction to lock the webbing. Rotation shall be stopped when the webbing locks, but the pull on the webbing shall be continued until there is a resistance of at least 89 N. The locking angle between the anchor end of the webbing and the base of the adjustment mechanism shall be measured to the nearest degree. The webbing shall be precycled 10 times prior to measurement.

(g) *Buckle latch.* The buckles from three seat belt assemblies shall be opened fully and closed at least 10 times. Then the buckles shall be clamped or firmly held against a flat surface so as to permit normal movement of buckle part, but with the metal mating plate (metal-to-metal buckles) or of webbing end (metal-to-webbing buckles) withdrawn from the buckle. The release mechanism shall be moved 200 times through the maximum possible travel against its stop with a force of 133 N \pm 13 N at a rate not to exceed 30 cycles per minute. The buckle shall be examined to determine compliance with the performance requirements of S4.3(g). A metal-to-metal buckle shall be examined to determine whether partial engagement is possible by means of any technique representative of actual use. If partial engagement is possible, the maximum force of separation when in such partial engagement shall be determined.

(h) *Nonlocking retractor.* After the retractor is cycled 10 times by full extension and retraction of the webbing, the retractor and webbing shall be suspended vertically and a force of 18 N shall be applied to extend the webbing from the retractor. The force shall be reduced to 13 N when attached to a pelvic restraint, or to 5 N per strap or webbing that contacts the shoulder of an occupant when retractor is attached to an upper torso restraint. The residual extension of the webbing shall be measured by manual rotation of the retractor drum or by disengaging the retraction mechanism. Measurements shall be made on three retractors. The location of the retractor attached to upper torso restraint shall be examined for visibility of reel during use of seat belt assembly in a vehicle.

NOTE: This test shall not be required on a nonlocking retractor attached to the free end of webbing which is not subjected to any tension during restraint of an occupant by the assembly.

(i) *Automatic-locking retractor.* Three retractors shall be tested in a manner to permit the retraction force to be determined exclusive of the gravitational forces on hardware or webbing being retracted. The webbing shall be fully extended from the retractor. While the webbing is being retracted, the average force or retraction within plus or minus 51 mm of 75 percent extension (25 percent retraction) shall be determined and the webbing movement between adjacent locking segments shall be measured in the same region of extension. A seat belt assembly with automatic locking retractor in upper torso restraint shall be tested in a vehicle in a manner prescribed by the installation and usage instructions. The retraction force on the occupant of the seat belt assembly shall be determined before and after traveling for 10 minutes at a speed of 24 kilometers per hour (km/h) or more over a rough road (e.g., Belgian block road) where the occupant is subjected to displacement with respect to the vehicle in both horizontal and vertical directions. Measurements shall be made with the vehicle stopped and the occupant in the normal seated position.

(j) *Emergency-locking retractor.* A retractor shall be tested in a manner

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that permits the retraction force to be determined exclusive of the gravitational forces on hardware or webbing being retracted. The webbing shall be fully extended from the retractor, passing over or through any hardware or other material specified in the installation instructions. While the webbing is being retracted, the lowest force of retraction within plus or minus 51 mm of 75 percent extension shall be determined. A retractor that is sensitive to webbing withdrawal shall be subjected to an acceleration of 3 m/s^2 (0.3 g) within a period of 50 milliseconds (ms) while the webbing is at 75 percent extension, to determine compliance with S4.3(j)(2). The retractor shall be subjected to an acceleration of 7 m/s^2 (0.7 g) within a period of 50 milliseconds (ms), while the webbing is at 75 percent extension, and the webbing movement before locking shall be measured under the following conditions: For a retractor sensitive to webbing withdrawal, the retractor shall be accelerated in the direction of webbing retraction while the retractor drum's central axis is oriented horizontally and at angles of 45° , 90° , 135° , and 180° to the horizontal plane. For a retractor sensitive to vehicle acceleration, the retractor shall be:

- (1) Accelerated in the horizontal plane in two directions normal to each other, while the retractor drum's central axis is oriented at the angle at which it is installed in the vehicle; and,
- (2) Accelerated in three directions normal to each other while the retractor drum's central axis is oriented at angles of 45° , 90° , 135° , and 180° from the angle at which it is installed in the vehicle, unless the retractor locks by gravitational force when tilted in any direction to any angle greater than 45° from the angle at which it is installed in the vehicle.

(k) *Performance of retractor.* After completion of the corrosion-resistance test described in paragraph (a) of this section, the webbing shall be fully extended and allowed to dry for at least 24 hours under standard laboratory conditions specified in S5.1(a). The retractor shall be examined for ferrous and nonferrous corrosion which may be transferred, either directly or by means of the webbing, to a person or

his clothing during use of a seat belt assembly incorporating the retractor, and for ferrous corrosion on significant surfaces if the retractor is part of the attachment hardware. The webbing shall be withdrawn manually and allowed to retract for 25 cycles. The retractor shall be mounted in an apparatus capable of extending the webbing fully, applying a force of 89 N at full extension, and allowing the webbing to retract freely and completely. The webbing shall be withdrawn from the retractor and allowed to retract repeatedly in this apparatus until 2,500 cycles are completed. The retractor and webbing shall then be subjected to the temperature resistance test prescribed in paragraph (b) of this section. The retractor shall be subjected to 2,500 additional cycles of webbing withdrawal and retraction. Then, the retractor and webbing shall be subjected to dust in a chamber similar to one illustrated in Figure 8 containing about 0.9 kg of coarse grade dust conforming to the specification given in Society of Automotive Engineers Recommended Practice J726, "Air Cleaner Test Code" Sept. 1979. The dust shall be agitated every 20 minutes for 5 seconds by compressed air, free of oil and moisture, at a gage pressure of $550 \pm 55 \text{ kPa}$ entering through an orifice $1.5 \pm 0.1 \text{ mm}$ in diameter. The webbing shall be extended to the top of the chamber and kept extended at all times except that the webbing shall be subjected to 10 cycles of complete retraction and extension within 1 to 2 minutes after each agitation of the dust. At the end of 5 hours, the assembly shall be removed from the chamber. The webbing shall be fully withdrawn from the retractor manually and allowed to retract completely for 25 cycles. An automatic-locking retractor or a nonlocking retractor attached to pelvic restraint shall be subjected to 5,000 additional cycles of webbing withdrawal and retraction. An emergency locking retractor or a nonlocking retractor attached to upper torso restraint shall be subjected to 45,000 additional cycles of webbing withdrawal and retraction between 50 and 100 per cent extension. The locking mechanism of an emergency locking retractor shall be actuated at least 10,000 times within 50 to

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100 percent extension of webbing during the 50,000 cycles. At the end of test, compliance of the retractors with applicable requirements in S4.3 (h), (i), and (j) shall be determined. Three retractors shall be tested for performance.

S5.3 Assembly performance—(a) Type I seat belt assembly. Three complete seat belt assemblies, including webbing, straps, buckles, adjustment and attachment hardware, and retractors, arranged in the form of a loop as shown in Figure 5, shall be tested in the following manner:

(1) The testing machine shall conform to the requirements specified in S5.1(b). A double-roller block shall be attached to one head of the testing machine. This block shall consist of two rollers 102 mm in diameter and sufficiently long so that no part of the seat belt assembly touches parts of the block other than the rollers during test. The rollers shall be mounted on antifriction bearings and spaced 305 mm between centers, and shall have sufficient capacity so that there is no brinelling, bending or other distortion of parts which may affect the results. An anchorage bar shall be fastened to the other head of the testing machine.

(2) The attachment hardware furnished with the seat belt assembly shall be attached to the anchorage bar. The anchor points shall be spaced so that the webbing is parallel in the two sides of the loop. The attaching bolts shall be parallel to, or at an angle of 45° or 90° to the webbing, whichever results in an angle nearest to 90° between webbing and attachment hardware except that eye bolts shall be vertical, and attaching bolts or nonthreaded anchorages of a seat belt assembly designed for use in specific models of motor vehicles shall be installed to produce the maximum angle in use indicated by the installation instructions, utilizing special fixtures if necessary to simulate installation in the motor vehicle. Rigid adapters between anchorage bar and attachment hardware shall be used if necessary to locate and orient the adjustment hardware. The adapters shall have a flat support face perpendicular to the threaded hole for the attaching bolt and adequate in area to provide full

support for the base of the attachment hardware connected to the webbing. If necessary, a washer shall be used under a swivel plate or other attachment hardware to prevent the webbing from being damaged as the attaching bolt is tightened.

(3) The length of the assembly loop from attaching bolt to attaching bolt shall be adjusted to about 1295 mm, or as near thereto as possible. A force of 245 N shall be applied to the loop to remove any slack in webbing at hardware. The force shall be removed and the heads of the testing machine shall be adjusted for an assembly loop between 1220 and 1270 mm in length. The length of the assembly loop shall then be adjusted by applying a force between 89 and 98 N to the free end of the webbing at the buckle, or by the retraction force of an automatic-locking or emergency-locking retractor. A seat belt assembly that cannot be adjusted to this length shall be adjusted as closely as possible. An automatic-locking or emergency locking retractor when included in a seat belt assembly shall be locked at the start of the test with a tension on the webbing slightly in excess of the retractive force in order to keep the retractor locked. The buckle shall be in a location so that it does not touch the rollers during test, but to facilitate making the buckle release test in S5.2(d) the buckle should be between the rollers or near a roller in one leg.

(4) The heads of the testing machine shall be separated at a rate between 51 and 102 mm per minute until a force of $22,241 \pm 222$ N is applied to the assembly loop. The extension of the loop shall be determined from measurements of head separation before and after the force is applied. The force shall be decreased to 667 ± 45 N and the buckle release force measured as prescribed in S5.2(d).

(5) After the buckle is released, the webbing shall be examined for cutting by the hardware. If the yarns are partially or completely severed in a line for a distance of 10 percent or more of the webbing width, the cut webbing shall be tested for breaking strength as specified in S5.1(b) locating the cut in the free length between grips. If there is insufficient webbing on either side of

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the cut to make such a test for breaking strength, another seat belt assembly shall be used with the webbing repositioned in the hardware. A tensile force of $11,120 \pm 111$ N shall be applied to the components or a force of $22,241 \pm 222$ N shall be applied to the assembly loop. After the force is removed, the breaking strength of the cut webbing shall be determined as prescribed above.

(6) If a Type 1 seat belt assembly includes an automatic-locking retractor or an emergency-locking retractor, the webbing and retractor shall be subjected to a tensile force of $11,120 \pm 111$ N with the webbing fully extended from the retractor.

(7) If a seat belt assembly has a buckle in which the tongue is capable of inverted insertion, one of the three assemblies shall be tested with the tongue inverted.

(b) *Type 2 seat belt assembly.* Components of three seat belt assemblies shall be tested in the following manner:

(i) The pelvic restraint between anchorages shall be adjusted to a length between 1220 and 1270 mm, or as near this length as possible if the design of the pelvic restraint does not permit its adjustment to this length. An automatic-locking or emergency-locking retractor when included in a seat belt assembly shall be locked at the start of the test with a tension on the webbing slightly in excess of the retractive force in order to keep the retractor locked. The attachment hardware shall be oriented to the webbing as specified in paragraph (a)(2) of this section and illustrated in Figure 5. A tensile force $11,120 \pm 111$ N shall be applied on the components in any convenient manner and the extension between anchorages under this force shall be measured. The force shall be reduced to 334 ± 22 N and the buckle release force measured as prescribed in S5.2(d).

(2) The components of the upper torso restraint shall be subjected to a tensile force of $6,672 \pm 67$ N following the procedure prescribed above for testing pelvic restraint and the extension between anchorages under this force shall be measured. If the testing apparatus permits, the pelvic and upper torso restraints may be tested simulta-

neously. The force shall be reduced to 334 ± 22 N and the buckle release force measured as prescribed in S5.2(d).

(3) Any component of the seat belt assembly common to both pelvic and upper torso restraint shall be subjected to a tensile force of $13,344 \pm 134$ N.

(4) After the buckle is released in tests of pelvic and upper torso restraints, the webbing shall be examined for cutting by the hardware. If the yarns are partially or completely severed in a line for a distance of 10 percent or more of the webbing width, the cut webbing shall be tested for breaking strength as specified in S5.1(b) locating the cut in the free length between grips. If there is insufficient webbing on either side of the cut to make such a test for breaking strength, another seat belt assembly shall be used with the webbing repositioned in the hardware. The force applied shall be $11,120 \pm 111$ N for components of pelvic restraint, and $6,672 \pm 67$ N for components of upper torso restraint. After the force is removed, the breaking strength of the cut webbing shall be determined as prescribed above.

(5) If a Type 2 seat belt assembly includes an automatic-locking retractor or an emergency-locking retractor the webbing and retractor shall be subjected to a tensile force of $11,120 \pm 111$ N with the webbing fully extended from the retractor, or to a tensile force of $6,672 \pm 67$ N with the webbing fully extended from the retractor if the design of the assembly permits only upper torso restraint forces on the retractor.

(6) If a seat belt assembly has a buckle in which the tongue is capable of inverted insertion, one of the three assemblies shall be tested with the tongue inverted.

(c) *Resistance to buckle abrasion.* Seat belt assemblies shall be tested for resistance to abrasion by each buckle or manual adjusting device normally used to adjust the size of the assembly. The webbing of the assembly to be used in this test shall be exposed for 4 hours to an atmosphere having relative humidity of 65 per cent and temperature of 18°C . The webbing shall be pulled back and forth through the buckle or manual adjusting device as shown schematically in Figure 7. The anchor end

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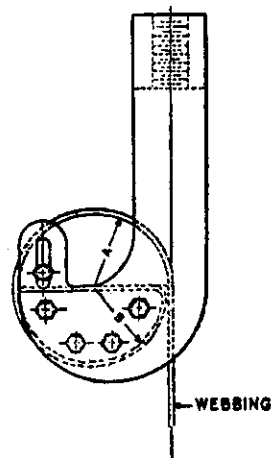
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of the webbing (A) shall be attached to a mass (B) of 1.4 kg. The webbing shall pass through the buckle (C), and the other end (D) shall be attached to a reciprocating device so that the webbing forms an angle of 8° with the hinge stop (E). The reciprocating device shall be

operated for 2,500 cycles at a rate of 18 cycles per minute with a stroke length of 203 mm. The abraded webbing shall be tested for breaking strength by the procedure described in paragraph S5.1(b).

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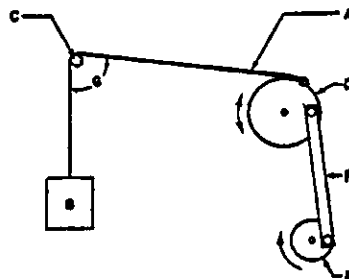
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A 1 TO 2 INCHES OR 2.5 TO 5 CENTIMETERS

B A MINUS 0.06 INCH OR 0.15 CENTIMETER

FIGURE 1



A - WEBBING

B - WEIGHT

C - HEXAGONAL ROD
STEEL - SAE 51416
ROCKWELL HARDNESS - 8-97 TO 8-101
SURFACE - COLD DRAWN FINISH
SIZE - 0.250 ± 0.001 INCH OR
 6.35 ± 0.03 MILLIMETER
RADIUS ON EDGES - 0.020 ± 0.004 INCH OR
 0.3 ± 0.1 MILLIMETER

D - DRUM DIAMETER - 16 INCHES OR
40 CENTIMETERS

E - CRANK

F - CRANK ARM

G - ANGLE BETWEEN WEBBING - 95 ± 2 DEGS.

FIGURE 2

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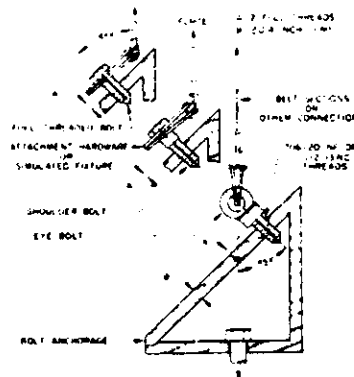


FIGURE 3

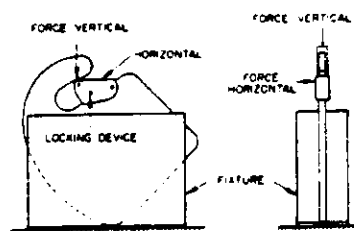


FIGURE 4
SINGLE ATTACHMENT HOOK

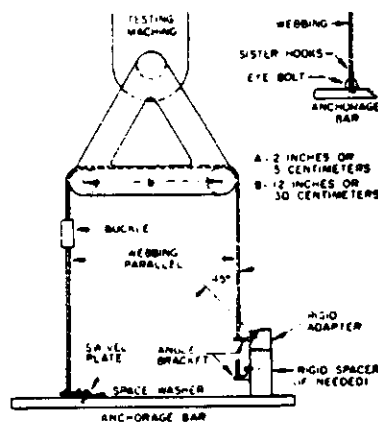


FIGURE 5

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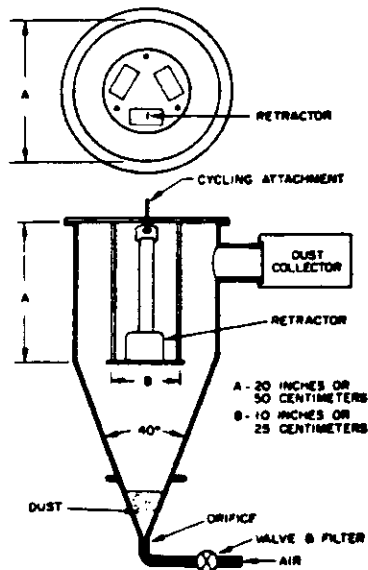


FIGURE 6

[34 F.R. 115
January 4, 1969]

NO TENSION

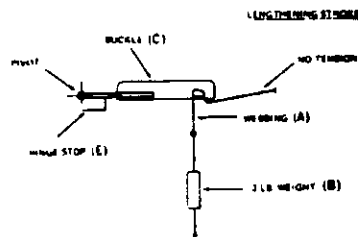
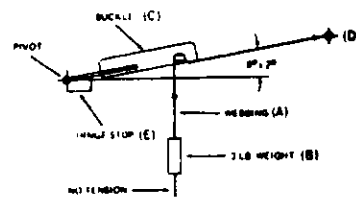


FIGURE 7

[44 FR 72139, Dec. 13, 1979, as amended at 45 FR 29048, May 1, 1980; 46 FR 2620, Jan. 12, 1981; 48 FR 30140, June 30, 1983; 49 FR 36508, Sept. 18, 1984; 51 FR 9813, Mar. 21, 1986; 51 FR 31774, Sept. 5, 1986; 52 FR 44912, Nov. 23, 1987; 56 FR 15299, Apr. 16, 1991; 56 FR 56325, Nov. 4, 1991; 59

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FR 17994, Apr. 15, 1994; 61 FR 20171, May 6, 1996; 63 FR 28936, May 27, 1998; 63 FR 51003, Sept. 24, 1998; 64 FR 27206, May 19, 1999]

§ 571.210 Standard No. 210; Seat belt assembly anchorages.

S1. *Purpose and scope.* This standard establishes requirements for seat belt assembly anchorages to insure their proper location for effective occupant restraint and to reduce the likelihood of their failure.

S2. *Application.* This standard applies to passenger cars, multipurpose passenger vehicles, trucks, and buses.

S3. *Definition.* *Seat belt anchorage* means any component, other than the webbing or straps, involved in transferring seat belt loads to the vehicle structure, including, but not limited to, the attachment hardware, seat frames, seat pedestals, the vehicle structure itself, and any part of the vehicle whose failure causes separation of the belt from the vehicle structure.

S4. Requirements.

S4.1 Type.

S4.1.1 Seat belt anchorages for a Type 1 or a Type 2 seat belt assembly shall be installed for each designated seating position for which a Type 1 or a Type 2 seat belt assembly is required by Standard No. 208 (49 CFR 571.208). Seat belt anchorages for a Type 2 seat belt assembly shall be installed for each designated seating position for which a Type 2 seat belt assembly is required by Standard No. 208 (49 CFR 571.208).

S4.1.2 (a) Notwithstanding the requirement of S4.1.1, each vehicle manufactured on or after September 1, 1987 that is equipped with an automatic restraint at the front right outboard designated seating position, which automatic restraint cannot be used for securing a child restraint system or cannot be adjusted by the vehicle owner to secure a child restraint system solely through the use of attachment hardware installed as an item of original equipment by the vehicle manufacturer, shall have, at the manufacturer's option, either anchorages for a Type 1 seat belt assembly installed at that position or a Type 1 or Type 2 seat belt assembly installed at that position. If a manufacturer elects to install anchorages for a Type 1 seat belt

assembly to comply with this requirement, those anchorages shall consist of, at a minimum, holes threaded to accept bolts that comply with S4.1(f) of Standard No. 209 (49 CFR 571.209).

(b) The requirement in S4.1.1 of this standard that seat belt anchorages for a Type 1 or a Type 2 seat belt assembly shall be installed for certain designated seating positions does not apply to any such seating positions that are equipped with a seat belt assembly that meets the frontal crash protection requirements of S5.1 of Standard No. 208 (49 CFR 571.208).

S4.2 Strength.

S4.2.1 Except as provided in S4.2.5, and except for side-facing seats, the anchorages, attachment hardware, and attachment bolts for any of the following seat belt assemblies shall withstand a 5,000 pound force when tested in accordance with S5.1 of this standard:

(a) Type 1 seat belt assembly; and

(b) Lap belt portion of either a Type 2 or automatic seat belt assembly, if such seat belt assembly is equipped with a detachable upper torso belt.

S4.2.2 Except as provided in S4.2.5, and except for side facing seats, the anchorages, attachment hardware, and attachment bolts for any of the following seat belt assemblies shall withstand a 3,000 pound force applied to the lap belt portion of the seat belt assembly simultaneously with a 3,000 pound force applied to the shoulder belt portion of the seat belt assembly, when tested in accordance with S5.2 of this standard:

(a) Type 2 and automatic seat belt assemblies that are installed to comply with Standard No. 208 (49 CFR 571.208); and

(b) Type 2 and automatic seat belt assemblies that are installed at a seating position required to have a Type 1 or Type 2 seat belt assembly by Standard No. 208 (49 CFR 571.208).

S4.2.3 Permanent deformation or rupture of a seat belt anchorage or its surrounding area is not considered to be a failure, if the required force is sustained for the specified time.

PUBLIC VERSION

EXHIBIT 7

PUBLIC VERSION

49 CFR S 578.6
49 C.F.R. § 578.6

CODE OF FEDERAL REGULATIONS
TITLE 49--TRANSPORTATION
SUBTITLE B--OTHER REGULATIONS
RELATING TO TRANSPORTATION
CHAPTER V--NATIONAL HIGHWAY TRAFFIC
SAFETY ADMINISTRATION, DEPARTMENT OF
TRANSPORTATION
PART 578--CIVIL AND CRIMINAL PENALTIES
Current through October 1, 2001; 66 FR 50093

§ 578.6 Civil penalties for violations of specified provisions of Title 49 of the United States Code.

(a)(1) Motor vehicle safety. A person who violates any of sections 30112, 30115, 30117 through 30122, 30123(d), 30125(c), 30127, or 30141 through 30147 of Title 49 of the United States Code or a regulation prescribed under any of those sections is liable to the United States Government for a civil penalty of not more than \$5,000 for each violation. A separate violation occurs for each motor vehicle or item of motor vehicle equipment and for each failure or refusal to allow or perform an act required by any of those sections. The maximum civil penalty under this paragraph for a related series of violations is \$15,000,000.

(2) Section 30166. A person who violates section 30166 of Title 49 of the United States Code or a regulation prescribed under that section is liable to the United States Government for a civil penalty for failing or refusing to allow or perform an act required under that section or regulation. The maximum penalty under this paragraph is \$5,000 per violation per day. The maximum penalty under this paragraph for a related series of daily violations is \$15,000,000.

(b) National Automobile Title Information System. An individual or entity violating 49 U.S.C. Chapter 305 is liable to the United States Government for a civil penalty of not more than \$1,100 for each violation.

(c) Bumper standards.

(1) A person that violates 49 U.S.C. § 32506(a) is liable to the United States Government for a civil penalty of not more than \$1,100 for each violation. A separate violation occurs for each passenger motor vehicle or item of passenger motor vehicle equipment involved in a violation of 49 U.S.C. 32506(a)(1) or (4)--

(i) That does not comply with a standard prescribed

under 49 U.S.C. 32502, or

(ii) For which a certificate is not provided, or for which a false or misleading certificate is provided, under 49 U.S.C. 32504.

(2) The maximum civil penalty under this paragraph (c) for a related series of violations is \$925,000.

(d) Consumer information regarding crashworthiness and damage susceptibility. A person that violates 49 U.S.C. 32308(a) is liable to the United States Government for a civil penalty of not more than \$1,100 for each violation. Each failure to provide information or comply with a regulation in violation of 49 U.S.C. 32308(a) is a separate violation. The maximum penalty under this paragraph for a related series of violations is \$450,000.

(e) Country of origin content labeling. A manufacturer of a passenger motor vehicle distributed in commerce for sale in the United States that willfully fails to attach the label required under 49 U.S.C. 32304 to a new passenger motor vehicle that the manufacturer manufactures or imports, or a dealer that fails to maintain that label as required under 49 U.S.C. 32304, is liable to the United States Government for a civil penalty of not more than \$1,100 for each violation. Each failure to attach or maintain that label for each vehicle is a separate violation.

(f) Odometer tampering and disclosure.

(1) A person that violates 49 U.S.C. Chapter 327 or a regulation prescribed or order issued thereunder is liable to the United States Government for a civil penalty of not more than \$2,200 for each violation. A separate violation occurs for each motor vehicle or device involved in the violation. The maximum civil penalty under this paragraph for a related series of violations is \$120,000.

(2) A person that violates 49 U.S.C. Chapter 327 or a regulation prescribed or order issued thereunder, with intent to defraud, is liable for three times the actual damages or \$2,000, whichever is greater.

(g) Vehicle theft protection.

(1) A person that violates 49 U.S.C. 33114(a)(1)-(4) is liable to the United States Government for a civil penalty of not more than \$1,100 for each violation. The failure of more than one part of a single motor

vehicle to conform to an applicable standard under 49 U.S.C. 33102 or 33103 is only a single violation. The maximum penalty under this paragraph for a related series of violations is \$300,000.

(2) A person that violates 49 U.S.C. 33114(a)(5) is liable to the United States government for a civil penalty of not more than \$120,000 a day for each violation.

(h) Automobile fuel economy.

(1) A person that violates 49 U.S.C. 32911(a) is liable to the United States Government for a civil penalty of not more than \$11,000 for each violation. A separate violation occurs for each day the violation continues.

(2) Except as provided in 49 U.S.C. 32912(c), a manufacturer that violates a standard prescribed for a model year under 49 U.S.C. 32902 is liable to the United States Government for a civil penalty of \$5.50 multiplied by each .1 of a mile a gallon by which the applicable average fuel economy standard under that section exceeds the average fuel economy--

(i) Calculated under 49 U.S.C. 32904(a)(1)(A) or (B) for automobiles to which the standard applies manufactured by the manufacturer during the model year;

(ii) Multiplied by the number of those automobiles; and

(iii) Reduced by the credits available to the manufacturer under 49 U.S.C. 32903 for the model year.

[64 FR 37878, July 14, 1999; 65 FR 68110, Nov. 14, 2000; 66 FR 41151, Aug. 7, 2001]

<General Materials (GM) - References, Annotations, or Tables>

49 C. F. R. § 578.6

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